

Exploring Disability Services in a Community College

by

Ryan Kociela

Bachelor of Science – Spanish Education, Indiana University of Pennsylvania, 1995

Master – Public Policy and Management, Carnegie Mellon University, 2002

Submitted to the Graduate Faculty of the
School of Education in partial fulfillment
of the requirements for the degree of
Doctor of Education

University of Pittsburgh

2020

UNIVERSITY OF PITTSBURGH

SCHOOL OF EDUCATION

This dissertation was presented

by

Ryan Kociela

It was defended on

July 2, 2020

and approved by

Dr. Michael Gunzenhauser, Associate Professor, Administrative and Policy Studies

Dr. Diane Kirk, Clinical Associate Professor, Administrative and Policy Studies

Dissertation Advisor: Dr. Cynthia Tananis, Associate Professor, Administrative and Policy
Studies

Copyright © by Ryan Kociela

2020

Exploring Disability Services in a Community College

Ryan Kociela, Ed.D

University of Pittsburgh, 2020

This research study examines the perceptions of current community college students relative to the impacts of their disabilities on their needs and continued enrollment in post-secondary study.

An increasing number of students with disabilities are attending post-secondary institutions. With the establishments of the Individuals with Disabilities Education Act in 1990, the Americans with Disabilities Act in 1990, and the Americans with Disabilities Amendment Act in 2009, legislation is formidably in place to support students with broad ranges of disabling conditions in K-12 and post-secondary schools. As case law mounts with concerns related to appropriate accommodations, ample services, and equitable access, educators scramble to meet minimum legislative standards relative to their disabled students. Getting to know students' individually unique circumstances and how to best employ the most appropriate services and resources in an educational setting is sometimes sacrificed for more protective legal processes and documentation.

Results and analysis of the 106 student surveys and 33 interviews within this research study are intended to inform broader post-secondary disability services practices, as well as serve as the basis for improvement planning locally at Butler County Community College.

Table of Contents

Acknowledgement	xi
1.0 Introduction.....	1
1.1 Statement of the Problem	2
1.2 Background of the Problem.....	3
1.3 Personal and Professional Perspective	5
1.4 Purpose	6
1.5 Research Questions	7
1.6 Proposed Inquiry Methods	8
1.7 Significance of the Study.....	8
1.8 Summary	9
2.0 Review of Supporting Literature.....	10
2.1 Background and Progressions of Disability Services	10
2.1.1 Definitions of Disability	11
2.1.2 Progressions with Disability Resources.....	12
2.1.3 Advances in Diagnoses and Technology.....	15
2.2 Transitioning from Secondary to Higher Education	17
2.2.1 Accessing Services	19
2.2.2 Inhibitions with Use of Disability Services	21
2.2.3 Awareness of Services in Higher Education	24
2.2.4 Post-Secondary Stigma	26
2.3 Factors Which Shape Disability Services	27

2.3.1 Guiding Legislation.....	28
2.3.2 Professional Development for Faculty and Staff.....	30
2.3.3 Resources and Expenses for Disability Services.....	32
2.4 Conclusion	34
3.0 Study Methods and Design.....	36
3.1 Introduction	36
3.2 Context of the Study	37
3.2.1 Disability Needs Affecting Learning in Higher Education.....	38
3.2.2 Institutional Context Generally and in Relation to Disability Services	39
3.3 Research Questions	41
3.3.1 Discussion of Research Question	41
3.4 Data Collection.....	42
3.4.1 Introduction of Methods.....	42
3.4.2 Data Collection and Analysis	43
3.5 Student Survey.....	44
3.5.1 Student Survey Population.....	46
3.6 Student Interviews.....	48
3.6.1 Interview Sample.....	49
3.7 Data Analysis	49
3.8 Conclusion	51
4.0 Analysis of Data.....	53
4.1 Student Surveys	53
4.1.1 Demographic Information.....	54

4.1.1.1 Campus	54
4.1.1.2 Gender	55
4.1.1.3 Enrollment Date and Credit Completion	55
4.1.1.4 Awareness and Registration for Accommodations.....	56
4.1.1.5 Nature of Disability.....	57
4.1.1.6 ADR Visits	58
4.1.2 Student Ratings	59
4.1.2.1 Disability Services Office (ADR)	59
4.1.2.2 Academic Accommodations.....	60
4.1.2.3 Campus Accessibility	62
4.1.2.4 Experiences with Instructors	62
4.1.2.5 Additional Needs, Awareness, and Recommendations	63
4.1.2.6 Impact of Disabilities on Enrollment	64
4.1.2.7 Improvements to Disability Services.....	65
4.1.3 Disaggregation by Campus	67
4.1.4 Survey Summary	69
4.2 Interview Responses	70
4.2.1 Strengths of Disability Services	71
4.2.2 Themes for Improvements to Services	72
4.2.3 Research Question #2.....	75
4.2.4 Summary	76
5.0 Interpretations and Implications.....	78
5.1 Perceptions of Needs and Services	79

5.1.1 Practical Applications	82
5.2 Disability Needs and Continued Enrollment	83
5.2.1 Implications for Professional Practice	85
5.3 Summary	87
6.0 Summary and Next Steps	89
6.1 Improvement Planning	90
6.2 Reflections and Professional Learning	91
6.3 Conclusion	94
Appendix A Student Survey Question	96
Appendix B Initial Direction for the Survey	100
Appendix C Student Interview Script and Questions	101
References	102

List of Tables

Table 2.1 Differences between K-12 and College services for students with disabilities	18
Table 3.1 Data Collection and Analysis	43
Table 3.2 Spring 2020 enrollment and students registered with the Office of Access and Disability Resources (ADR)	47
Table 3.3 Relation of survey questions to overriding research questions.....	47
Table 3.4 Objectives for survey and interview questions.....	50
Table 4.1 Students registered with the Office of Access and Disability Resources (ADR), and survey response rates (Spring 2020).....	55
Table 4.2 Nature of students' disabilities.....	58
Table 4.3 Frequency of visits with disability service providers	58
Table 4.4 Ratings of accommodations with frequency percents of participants.....	61
Table 4.5 Ratings of disability-related interactions with instructors.....	63
Table 4.6 Impacts of disability on continued enrollment	65
Table 4.7 Coded responses to improvements to disability services	66
Table 4.8 Main campus and off-campus comparison	67
Table 4.9 Students' responses to overriding research questions	69
Table 4.10 Disability Needs Met at BC3	75

List of Figures

Figure 4.1 Credit completion of responding students.....	56
Figure 4.2 Students who came to BC3 knowing that disability services were available	56
Figure 4.3 Ratings of ADR interactions and services	60
Figure 4.4 Frequency of use of specific accommodations	61
Figure 4.5 Inclusion of disability-related statement on syllabus	62

Acknowledgement

It is surreal to come to a place that has at times seemed so distant and unreachable. Overcoming various challenges and digging deep inside to find the ambition and dedication needed to achieve the highest level of education has been difficult, but having the encouragement and support of colleagues, mentors, friends and family has without question made this possible.

To my dissertation panel, Dr. Diane Kirk, Dr. Mike Gunzenhauser, and Dr. Cindy Tananis: You have been exceptional mentors and my support system at the University of Pittsburgh. I could not have asked for a better panel, group of graduate instructors, and professional friends. Thank you all for believing in me and Cindy, for kicking my ass to the extent needed to finish my degree. I could not have asked for a better advisor and mentor.

To my colleagues Josh Novak and Jenn Loue: After falling fairly hard, I landed in a very supportive, encouraging, and collegial place where I rediscovered professional confidence and a drive to continue to learn and grow. You are both to thank for that. You have been incredibly supportive and encouraging of my doctoral work and work in higher education. Thank you both for your friendship, mentorship, and encouragement.

To my mother Pat and father Craig: I can't thank you both enough for supporting me through my years of schooling. You've always encouraged me to be the best student I can be and to achieve big. You pushed when I needed it, never held me back, and believed in me when I didn't believe in myself. I hope you are proud and I love you both very much.

To my children Nathan and Jamie: Thank you for pretending to be interested when I explained how to cite a resource, read disability case law, and showed you what colorful coding

looks like. I hope I have modeled that hard work and commitment will help you to reach your goals and dreams. I love you both and am very proud of you.

Most importantly, to my wife Nicole: Of all the people who have made this possible, you are the driving force behind my achievements. You've earned them as much as I have. Thank you for your constant encouragement, support, and sacrifices. For both of our sanity sake, I think I'll take a break from schooling for a while, though I know that as fellow educators neither of us will ever stop learning. I love you so much!

1.0 Introduction

Disability services in colleges and universities generally serve to provide access to all educational programming for students with disabilities. Disability services offices are typically located within the structure of student affairs departments in both public and private higher education institutions receiving federal funding. Students must register voluntarily for services, resources, and accommodations related to their disability, and have their accommodations approved by a disability service provider.

Students may utilize or forego disability services, and may meet with their designated service provider as often or little as they choose. Some accommodations and services may not be approved by disability service providers. As noted by the Americans with Disabilities Act National Network (n.d), “accommodations are not required when it would fundamentally alter the nature of the service, program, or activity or give rise to an undue financial or administrative burden” (p. 1). Examples of general accommodations afforded to students with disabilities include test taking accommodations, support for class notes, attendance flexibilities, alternate formatting of course materials, American Sign Language interpreting, and calculator availability. As the disability-related needs of every student are different, it is important for disability service providers to work collaboratively with students. This approach assists in understanding students’ needs and employing a plan for accommodations that provides equitable access to educational programming that is as unimpaired as possible by the students’ disabilities.

1.1 Statement of the Problem

In my role as a practicing disability services provider, questions constantly surface about the appropriate use and non-use of disability services by qualified students. It is unclear whether students know that disability-related accommodations exist in colleges and if there are barriers to accessing disability services from the student perspective. For those who use them, disability service providers may not know how students learn of disability services and why they choose to register. We have no way of knowing who on campus is disabled and in desperate need of services, and we're not legally permitted to ask if a student has a disability. It is difficult to examine practices when we don't know the extent to which students are utilizing disability services and when utilized, if the services are providing the equitable access to higher education that they are required to provide. The U.S. Department of Education (2019) notes that 19.4% of all undergraduate students have conditions that qualify them as disabled. But while almost 20% of college students have some form of disability, "the median percentage across all institutions of undergraduate students formally registered as having a disability was only 6% in 2017" (Jones & Mitchell, 2019, p. 2).

Any individual can choose not to disclose that they have a disability and if their disability is not visibly apparent, others may never know. It is similarly the right of college students to entirely forego the use of disability services, even if they are qualified to receive them. In these instances, disability service providers have no recourse. For students choosing not to use accommodations, the hope is that they can be successful with the challenges of college coursework independent of disability services.

Concerns arise for students not utilizing disability services because of not knowing that services exist, fear of disability stigma, denial of accommodations, and complications to accessing services. Many students with disabilities need accommodations to overcome the challenges of college coursework, as the demands can become overwhelming and at times make the difference between continuing enrollment and dropping out of college entirely. Gaining students' perspectives on these questions and uncertainties is essential to meaningful improvement planning for the Office of Access and Disability Resources at Butler County Community College and for higher education institutions in general.

1.2 Background of the Problem

The provision of disability services is not new to higher education, but has become an extremely important and rapidly growing facet of student affairs. Disability services are continuously re-shaped by ongoing, high-profile case law which can cost colleges and universities significant efforts and resources. Providing comprehensive disability services is essential to ensuring access to educational programming and avoiding such litigation. This can prove difficult with the growing number of individuals diagnosed with various disabilities. As the field of medicine continues to progress, so too do the intricacies of diagnoses which need to be accommodated in unique and innovative ways. Often, these accommodations are determined and approved by less than qualified disability service providers, with very limited resources. The complexities of medical advances and advances in instructional practices and educational technologies, can make meeting the basic tenets of ensuring access to educational programming overwhelming.

In years prior to the adoption of the Americans with Disabilities Amendment Act, expectations for individuals with disabilities in higher education was minimal. Students with disabilities did not generally go to college. Unfortunately, some of this sentiment still exists among faculty, staff, and students in colleges and universities today. These antiquated perceptions can shape the willingness of students to identify as disabled and access services for fear of stigma by their instructors and peers. Jones and Mitchell (2019) note that students with disabilities face the ongoing struggles of public stigma and their disability-related needs being misperceived for laziness, disorganization, and apathy. Understandably, students would prefer to avoid being perceived as different, lesser than their non-disabled peers, or even incapable of being a successful college student.

The transition of students with disabilities from high school to college is also an extremely daunting endeavor. High school transition services play a significant role in preparing students in special education for the use of available college services. However, if not prepared in advance of the start to students' first semester in college, services can become secondary or even forgotten. Although the National Joint Commission on Learning Disabilities (1994) notes that effective high school transition programs make parents and students aware of available services and accommodations in college, this does not occur on a consistent basis. Mader and Butrymowicz (2017) also note the extreme differences between highly structured high school settings to virtually no structure in higher education, creating a strong likelihood for students with disabilities to perform poorly and/or drop out of college quickly. Students may also not even be aware that they are technically classified as "disabled" coming into college, as the overriding classification in K-12 is "special education" not "disabled." Such confusion can lead to students' failure to access their entitled disability services.

One approach to improving services and mitigating adversity is to utilize the feedback of students directly, by examining students' perceptions of their needs and existing disability services. Analysis of students' perceptions can uncover areas of needs previously unknown to disability service providers, show students that their feedback is important, and demonstrate that improvements to disability services is of high priority to the college or university.

1.3 Personal and Professional Perspective

As a former high school teacher and principal, I had the opportunity to work with students with special needs in the classroom and administratively. I learned how to best meet the needs of students with a wide variety of exceptionalities within a sometimes limited pool of resources. I became very familiar with expected processes and practices. Currently, as a disability services provider in a community college, I have learned the stark differences between high school and college practices related to students with disability-related needs. My experiences have provided the Office of Access and Disability Services with beneficial knowledge about the transition that high school students make between utilizing special education services in high school to utilizing disability services in college. Analysis of these differences has led to several improvements within current services at Butler County Community College, but these improvements reflect only a beginning to a much larger undertaking.

In addition to my professional experiences, I have a fairly broad range of personal experiences with individuals with disabilities. Within my family exist cases of mental health disorders, chronic health conditions, ADHD, and auditory processing impairment. My father is legally blind, my son is challenged by autism spectrum disorder, and I have Crohn's disease which

is thankfully controlled at the present time. Though we do not use these conditions to define us, there are sometimes adjustments and accommodations needed to participate in and enjoy basic life activities in which non-disabled people are entirely unaffected. These personal connections have instilled in me a passion for assisting individuals with disabilities, helping to negate disability stigma, and creating more equitable access to educational services for students to learn and achieve without the added challenges of the limitations of their conditions.

1.4 Purpose

The purpose of the study was to gain an understanding of students' perceptions of their disability-related needs, relative to their continued enrollment and graduation from college. More specifically, the study intended to examine students' perceptions of how their needs and the effectiveness of services and resources available to them at Butler County Community College impacted their continued enrollment and graduation. The study was not directed or influenced in any way by the administration of BC3. Progress of the study was shared with various administrators throughout the process, who were fully supportive of the direction for the study and implications to the college. In the study, I collected and analyzed data that can provide insight into students' challenges and needs, the effectiveness of services, and priorities for improvement planning for the Office of Access and Disability Resources in its entirety.

One challenge within the study was for disability service providers (including me) to put aside their own biases, and put first the knowledge, experiences and personal beliefs of the students. Even at times when the disability service provider is convinced that a theme or emergent pattern within student generated data is inaccurate, it was essential to examine the cause of that

perception and the potential need to address the perceived issue. As improvement planning is generally ongoing among disability service providers as a result of their own experiences and continued learning, this study was unique to the perceptions and experiences of students.

The literature, data, and analyses within the study served as the basis for improvement-focused action planning aimed at providing more effective disability services at Butler County Community College. The study also intends to assist with efforts to inform students about utilizing disability services at the college level, encourage qualified students who aren't currently using services to register with the Office of Access and Disability Resources, and to create a campus-wide culture more inclusive of students with disabilities.

1.5 Research Questions

Students' perceptions of their disability-related needs, existing services and resources, and the impact of services on their enrollment in higher education frame the focus of the research study.

The following questions were examined within the scope of the study:

1. What are the students' perceptions of their disability-related needs and existing institutional services?
2. How do students perceive their disability needs and institutional services might impact their enrollment or graduation trajectories?

1.6 Proposed Inquiry Methods

The research questions were examined using two inquiry methods. The first method, a survey, was sent to all students registered with the Office of Access and Disability Resources at Butler County Community College. The survey consisted of basic closed-ended and open-ended questions, and collected both qualitative and quantitative data. The second inquiry method was a compilation of individual student interviews. At the end of the survey, students were asked to voluntarily participate in an individual interview with the researcher. Interview questions were created from the analysis of the student survey data, considering emerging patterns and themes. The interviews sought to gain deeper personal perceptions of students' needs and experiences with disability services, in pursuit of their post-secondary education.

1.7 Significance of the Study

This research study was designed to examine the perceptions of students with disabilities relative to their use of disability services in higher education. The hope was to better understand which services and resources work best for students and what improvements can be made to existing services, with the ultimate goal of maintaining enrollment and graduating students with disabilities. The study provides a basis for discussions of analyses and improvement planning specific to Butler County Community College (BC3), for the services and resources made available to students with disabilities. The research study was conducted at BC3 with current BC3 students. Data and analyses will be shared with other disability service administrators and student services administrators with the intentions of improvement-focused action planning. This study

also aims to inform industry practices of disability services across community colleges, as well as generally among higher education institutions. Many of the questions and notable themes within the study are common to disability service providers in any college setting.

1.8 Summary

The basic job of a disability services provider is to ensure access to educational services for students with disabilities. Similar to other responsibilities at their basic level, services can be fulfilled to a level which simply satisfies the basic requirements of the responsibility, or can be provided well beyond the basic requirements. This often depends on the nature, benefit, and resources associated with the particular service. As the basic requirement of disability services is to provide “access” to educational services, working to provide a more wide-scale “inclusivity” on college campuses for students with disabilities is reflective of taking practices well above and beyond their basic requirements.

This study intends to inform practice for disability service providers from the perspective of improvement-focused practices, lending to how we can not only fulfill our basic responsibilities, but how we can provide highly inclusive services for students in higher education.

2.0 Review of Supporting Literature

2.1 Background and Progressions of Disability Services

Dating back to the late 1800s and early 1900s, examples of students with disabilities in higher education were mainly limited to the founding of Gallaudet College for the Deaf, and several isolated instances of students such as Helen Keller's success at Radcliffe College (Madaus, 2011). Recognized disabilities were limited to physical and/or visible disabilities, including persons with paralysis, vision impairments, and hearing impairments. By the end of World War I and World War II, the Vocational Rehabilitation Act and the GI Bill of Rights prompted significant changes, particularly for veterans (Madaus, 2011). "This influx of veterans resulted in a corresponding increase in students with disabilities enrolling in college" (Madaus, 2011, p. 6). Physically related disabilities continued to be the most widely recognized conditions from the end of World War II through the 1960s.

The civil rights movement and legislation such as the Vocational Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990 expanded opportunities and heightened awareness of disability rights (Madaus, 2011). The Americans with Disabilities Amendment Act of 2009 expanded the definition and limitations of the previous definition of what constitutes a disability, particularly including learning disabilities and psychological conditions not previously recognized (Madaus, 2011). From very few students with disabilities attending colleges in the early 1900s, the National Center for Education Statistics (2019) reported that in 2015-2016, 19% of all undergraduate students had some form of disability. As a result of this increase "the field of

postsecondary disability services has moved from a fledgling aspect of the higher education enterprise to an established profession” (Madaus, 2011, p. 13).

2.1.1 Definitions of Disability

The Americans with Disabilities Amendment Act of 2009 enacted a revision to the definition of the term “disability,” stating that a disability is “a physical or mental impairment that substantially limits one or more major life activities” (U.S. Equal Employment Opportunity Commission [EEOC], n.d.). The revision attempted to clarify the qualification of an individual for disability status in federally funded organizations and service areas, including higher education. Though the broadened scope and definition included physical and mental impairments, which were not all previously qualifying as disabilities.

Varying definitions by different agencies can factor into utilization of disability services in higher education. To qualify as disabled through the Social Security Administration, individuals “must be unable to do substantial work” and their “medical condition must have lasted or be expected to last at least one year or to result in death” (Ask Vetsfirst, n.d.). The Department of Veterans Affairs requires that an individual “must have a disability that the VA determines was incurred or aggravated as the result of military service” (Ask Vetsfirst, n.d.). Ask Vetsfirst (n.d.) emphasizes that qualifying for a disability through one entity does not necessarily ensure qualification through another. In addition to varying definitions, different organizations generally utilize different processes by which they assess and determine disability status. Generally, disability is defined as “a physical, cognitive, or developmental condition that impairs, interferes with, or limits a person’s ability to engage in certain tasks or actions or participate in typical daily activities and interactions” (Merriam-Webster, n.d.). This definition is relatively consistent to the

Americans with Disabilities Amendment Act of 2009. However, Merriam-Webster goes on to define disability in the context of children, medical, and legal, all which vary. Of note, the children's definition of disability reads, "a condition (as one present at birth or caused by injury) that damages or limits a person's abilities" (Merriam-Webster, n.d.). With the number of different definitions of the term disability (and there are certainly more) coupled with different processes of determining disability status, individuals can become lost in determining whether or not to access services and resources. Understandably, it may not be clear to students which definition of the term "disability" applies specifically to higher education.

Present variations in definitions of disability, as well as personal interpretations and what it has traditionally meant to be disabled, may very well limit the number of students who know about or choose to access disability services in higher education. With the revision and clarification of "disability" and "daily life activities" in the Americans with Disabilities Amendment Act of 2009, a significantly larger pool of individuals qualify for services and accommodations, particularly those with learning disabilities (Madaus, 2011). Although stigmas continue, the definition of disability and qualifications for services has never been more prevalent, leading to increases in utilization of disability services in higher education.

2.1.2 Progressions with Disability Resources

For many reasons, the field of education is often slow to change and progress. This stagnation includes P-12 education and higher education alike. Because many instructors in higher education are not formally trained educators, perceptions of and experiences with what constitutes effective education can sometimes come from their own experiences as students, dating back decades. Grasgreen (2014) laments numerous student encounters with professors where it became

evident that professors' abilities, and at times their willingness to work with students with disabilities was significantly lacking. Some professors are willing and even experienced at working with students with disabilities, while others either are willing to work with students but aren't sure how, or simply don't believe that students with disabilities have a place in higher education. "Many colleges and universities still lack coherent policies around accessibility, and those that have them sometimes struggle to enforce or define them across the entire university" (Lieberman, 2019, p. 1). Though schools are required to provide professional development for all staff relative to disabilities and accommodations, it is not happening effectively (Harbor & Greenberg, 2017). Harbor and Greenberg (2017) acknowledge that "faculty knowledge about services and accommodations tends to be insufficient" (p. 10). In order to progress to meeting the needs of today's students with disabilities, disability services administrators serve as a resource for instructors and all campus employees by emphasizing the requirements of providing access to students, providing professional development, and by making themselves available for questions and concerns.

Several examples of progressive practices in disability services demonstrate efforts by higher education institutions to become more accessible and even inclusive of students with disabilities. The Duke Disability Alliance demonstrates an example of exemplary disability programming and initiatives which go well beyond simply meeting the "accessibility" requirement of the Americans with Disabilities Act. The "Alliance" (n.d.) seeks to engage all school stakeholders in building a community of acceptance, rather than simply working in isolation with individuals with disabilities. By building awareness and capacity within the entire community, the hope is to remove any focus and stigma of disabilities and instead accept every individual regardless of their differences (Duke Disability Alliance, n.d.). Another example of progressive

practice is the “accessible campus,” where textbooks and course materials are only adopted if digitally available to all students, not just students with disabilities (Harbour & Greenberg, 2017). Accessible campuses for all students remove the need for individual accommodations related to course materials, which removes apprehensions of students with disabilities from seeking the assistance they may need from a disability services administrator. Institutions have made it a priority to move to accessible resources out of fear for litigation (Lieberman, 2018). Grasgreen (2014) notes that Louisiana Tech University stopped “using and purchasing learning materials that limit access for students with visual disabilities” (p. 2) as part of a settlement with the U.S. Justice Department.

With the understanding that change is slow and resources are limited in higher education, three strategies seem to repeatedly surface relative to progressing disability resources beyond accessibility requirements, into a more progressive approach of inclusion. First, universal design encompasses a set of frameworks which guide faculty to inclusive practices in instructional activity, provision of resources, and assessments (Lombardi, McGuire, & Tarconish, 2018). Universal design fosters accessibility to learning without the need for accommodations for students with disabilities, lending to inclusivity without distinguishing disability. Greater participation in universally designed practices lends to more equal access to educational services for all students (McGuire, 2014). Second, working with human resource departments to recruit new employees with disabilities provides a deliberate acceptance of persons with disabilities and reinforces a goal of an institution for campus inclusion (Harbor & Greenberg, 2017). Finally, administering a campus-wide assessment of disability services promotes a priority of disability inclusion to all staff, assesses disability needs, and enables input and ownership by staff in the process of improving access (Harbor & Greenberg, 2017). The Association on Higher Education and

Disability (n.d.) publishes professional standards from which a comprehensive assessment of an institution can be readily administered.

2.1.3 Advances in Diagnoses and Technology

The volume of students seeking the use of disability services in higher education has gradually increased over the course of the last century, but even more so within the last decade. The U.S. Government Accountability Office (2009) noted 11% of postsecondary students reported having a disability in 2004. In 2015-16, 19.4% of postsecondary students reported a disability according to the U.S. Department of Education (2019). Such a significant increase in students with disabilities seeking services and accommodations poses an equally significant challenge for disability service providers responsible for ensuring access in higher education. Harbour and Greenberg (2017) recognize that disability service providers cannot reasonably assume sole responsibility for students with disabilities, citing a need to share accountability campus-wide. Harbour and Greenberg urge colleges and universities to focus more attention to disability services given the significant increase in disabled students, largely due to the continuous expansion of diagnoses, constantly evolving case law, and legislation. Though there have been numerous recent high-profile lawsuits surrounding disability services in higher education, “many colleges and universities still lack coherent policies around accessibility, and those that have them sometimes struggle to enforce or define them across the entire university” (Lieberman, 2019, p. 1).

In my brief experience as a disability service provider, I have encountered several requests for disability accommodations for diagnoses with which I am entirely unfamiliar. Students with psychological disabilities far outnumber students with traditional physical and visible disabilities

(Madaus, 2011). Invisible disabilities present a unique challenge for disability service providers and faculty. The U.S. Government Accountability Office (2009) notes the increases in populations of students with specific psychological disabilities such as autism, bi-polar disorder and anxiety disorders, and implores the need for staff with specialized expertise. Disability services offices “were not designed to support the types of psychological disabilities they now encounter among students” (U.S. Government Accountability Office, 2009, p. 22).

As expanded diagnoses have become a challenge for disability service providers, so have technological advances in education. Just as many disability service providers are not qualified healthcare professionals, the necessary aptitude for assistive technology can also present significant challenges. “The impact of technology continues to be an enigma for colleges in relation to students with disabilities” (Madaus, 2011, p. 12). Knowing where to find accessible resources and how to adapt countless platforms of content is daunting. The U.S. Government Accountability Office (2009) recognizes significant increases in technology related educational opportunities for students with disabilities and assistive technology resources needed to support students’ access to such opportunities. Disability services therefore extend well beyond the expertise of the disability services office, to media resource and technology staff at colleges and universities.

Disability service providers face a wide range of challenges with providing access to educational services for students with disabilities, and need to employ the knowledge, resources and assistance of staff campus-wide. The complications of achieving accessibility for students with disabilities, particularly given the “siloes, dispersed nature of higher education” (Grasgreen, 2014, p. 2). Small offices of disability service providers at colleges and universities, overwhelmed by requests for services, often are unable to provide much more than simple accessibility and

compliance of ADA regulations (Grasgreen, 2014). The U.S. Government Accountability Office (2009) also notes other challenges for disability services providers including converting materials to accessible formats, finding electronic formats of texts, finding space and proctors to provide accommodations, and faculty's lack of understanding of the legal requirements for providing accommodations.

2.2 Transitioning from Secondary to Higher Education

The transition for students from high school to college can be very challenging, but for students with disabilities, this transition can be overwhelming. Services provided in high school significantly differ from those in higher education, as well as the process for accessing services and accommodations. As students in K-12 schools are entitled to the right to a free appropriate public education (as per the Individuals with Disabilities Education Act), higher education institutions are required only to provide accessibility to educational programs for students (as per the Americans with Disabilities Act). This difference in legislation creates significant differences in the accommodations and assistance available to students going from K-12 schools to colleges and universities. Several notable differences are depicted in Table 2-1 on the following page.

Table 2.1 Differences between K-12 and College services for students with disabilities
(Center on Technology and Disability, n.d.)

K-12 Schools	College
Requirements for meetings and documentation	Meetings and documentation at the discretion of each college
Students required to participate	Students choose to participate
Parents advocate for students	Students advocate for themselves
Assignments and tests may be adapted	Assignments and tests are not adapted
Assignment dates can be flexible	Assignment dates are rarely flexible
Parents and school staff monitor progress and achievement	Only students have access to ongoing progress and achievement
Curriculum can be modified	Curriculum is not modified
Time managed and assignments structured through schedule created by IEP team	Time managed by students
Required interventions and measures	Recommended resources

Students choosing to access disability services in colleges and universities generally assume this responsibility on their own. First, students must contact the disability services office to complete an application and/or arrange a meeting. In the meeting, the student will share their disability and disability related needs. Students are generally required to bring documentation of their disability to the meeting, or submit documentation soon after the meeting. Generally, the student and a disability service provider are the only two individuals at the meeting. Disability service providers discuss and negotiate with the student what accommodations related to the student's disability are needed in order to access to educational services. Some common accommodations include extended testing time, testing in a private room, calculator availability, Sign Language interpreting, note-taking, attendance flexibilities, and alternate formats for texts and online resources. Once agreed upon, these accommodations are documented to a student's "letter of accommodations." Students are then responsible for sharing this letter with their instructors in order to activate their available accommodations. Instructors are only notified that a student has disability-related accommodations available, if the student communicates to the

instructor directly. Students may choose to activate accommodations for certain, but not all classes. If students experience any issues with the provision of accommodations, they are directed to contact their disability service provider for assistance. The process is entirely owned and executed by the student, with assistance as requested from disability service providers.

2.2.1 Accessing Services

Almost 20 percent of undergraduate students in postsecondary institutions have some form of disability (U.S. Department of Education, 2019). However, many students forego the use of accommodations largely related to their inabilities and insecurities in doing so (Grasgreen, 2014). Grasgreen (2014) lists new student insecurities, complicated bureaucracy, overcoming stigma and ignorance, and the requirement of self-advocacy and far less support than students had in high schools as factors relating to non-utilization of disability services. Barnard-Brak, Lan and Lechtenberger (2010) further indicate that students are not utilizing available disability services to their fullest potential by not seeking out services at all or by accessing services too late in their college endeavors. Given the extensive support that students had prior to entering colleges, they are often not prepared to seek, negotiate, and effectively manage accommodations on their own in higher education (Barnard-Brak, Lan & Lechtenberger, 2010). A study by the National Center for College Students with Disabilities noted that many “students expressed confusion about what forms of ‘disability’ were eligible for accommodations and services” in higher education (Scott, 2019, p. 9).

The lack of preparation for accessing disability services and available accommodations by students coming from high schools has caused disability service providers to express concern with the transition services provided by high school staff (Janiga & Costenbader, 2002). Lacking the

knowledge and understanding needed to access disability services raises significant concerns about the number of students who fail to access accommodations for significant academic needs. Through successful transition planning, students know their rights and responsibilities to prepare and access higher education and should know where to find and how to access available disability services (National Joint Committee on Learning Disabilities, 1994). Further, it is a responsibility of transition services and high school personnel to inform students and parents of disability services in higher education (National Joint Committee on Learning Disabilities, 1994). With such a stark contrast in students' responsibilities from high school to postsecondary schooling, high school transition services are essential in preparing students to assume their expected role in accessing and utilizing available accommodations in higher education.

Another significant concern with students' preparation and ability to access disability services in higher education is the diminished role of their parents or guardians in the process. The Center on Technology and Disability charts the distinctions between parents' roles in K-12 and higher education. From primary through secondary schooling, parents are students' primary advocates and directly participate in the process of determining goals and accommodations (Center on Technology and Disability, n.d.). Parents are legally required to be team members for students with Individualized Education Plans (IEPs) and 504 Services Agreements, and generally expected to be the primary advocates for students. Students contribute to their educational goals and accommodations, but the process and end result of meetings are largely determined by advocacy and suggestions from parents and the suggestions and available resources of educators. In higher education, students are tasked with seeking their own accommodations and serve as their own advocates, while parents are not even permitted to access records without written consent of the student (Center on Technology and Disability, n.d.). The Understood Team (n.d.) notes how

difficult this adjustment can become for parents, going from essentially leading a child's educational services and accommodations in primary and secondary schooling, to needing their student's permission to even access records or speak with disability service providers. The process can be extremely difficult and complicated for students, particularly for those whose disability may be directly related to anxiety, social skills, and self-advocacy; some of the traits needed to employ disability services effectively (Grasgreen, 2014). From applicable laws and required documentation, to the parents', students' and instructors' roles in providing disability services, the responsibility shift from parents to student is drastic when transitioning from high school to higher education (Center on Technology and Disability, n.d.).

Utilizing and maintaining accommodations in higher education is also a significantly different undertaking than in high schools, requiring students to initiate communications and often explain and negotiate specific needs related to their disabilities (The Understood Team, n.d.). Students face numerous challenges with the provision and advocacy of their accommodations, including instructor push-back, non-responsive instructors, and the fear of disability stigma (Scott, 2019). Students' most frequently cited barrier for presenting their disability and accommodations is "how students think faculty would perceive them" (Hong, 2015, p. 214). Another significant concern for students can be the perceived power differential between students and professors. These perceived barriers often cause students to forego use of their available academic accommodations.

2.2.2 Inhibitions with Use of Disability Services

Mark Twain once said, "the difference between the almost right word and the right word is really a large matter—'tis the difference between the lightning bug and the lightning" (Good

Reads, n.d.). Given differences in terminology used for students receiving special education services or 504 accommodations in high schools, the term “disability,” which may never have been applied to students previously, may be daunting for students transitioning to higher education. Atkinson (2015) cautions that some members of the disability community prefer to emphasize the “ability” part of their label, rather than to resign to the inherently negative prefix which can too often be perceived as negative by others. The prefix “dis” is not generally an implication that a parent would want attached to their child, or even themselves. Subsequently, many students choose not to identify as a person with a disability and therefore forego available resources and accommodations in college (Atkinson, 2015). The National Longitudinal Transition Study-2 reported that “only 35% of students with disabilities who attended any type of postsecondary school self-disclosed the disability to the institution” (Newman & Madaus, 2015, p. 1).

Students sometimes express “confusion about what forms of ‘disability’ are eligible for accommodations and services” (Scott, 2019, p. 9). The confusion that many students have relative to the procedures for acquiring accommodations in higher education (Scott, 2019). Such confusions are common given that the application for services, advocacy, disclosures, monitoring and review of achievement were all largely completed for students by parents and staff while students were in high schools. In higher education, all aspects of accessing, disclosing, and utilizing such services become the responsibilities of the students. Not surprisingly relative to this shift in responsibilities, students also cited the process of becoming eligible for accommodations as an “added burden, frustrating, hard to get done, and an extra stressor” (Scott, 2019, p. 10).

The potential for stigma can have a “chilling impact on students’ ability to disclose disabilities and advocate for removing campus barriers” (Scott, 2019, p. 14). “While the field of

postsecondary disability is increasingly embracing a model that recognizes disability as an aspect of student diversity, not all campuses or community members have recognized this” (Scott, 2019, p. 14). The significance of societal attitudes towards persons with disabilities, noting that “they determine to a large degree the extent to which the personal, social, educational, and psychological needs of persons with disabilities will be realized” (Munyi, 2012, p. 9). Students may simply choose to exercise their right to independence from disability services and accommodations in higher education, and essentially, from subjecting themselves to potential judgment and negative attitudes associated with their disabilities (Barnard-Brak, Lan, & Lechtenberger, 2010).

Students’ concerns that “the physical act of handing an instructor a LOA (letter of accommodation) represents a disclosure in itself by students of some sort of disabling condition requiring accommodation” and frequently prompts further questioning of the condition by instructors (Barnard-Brak, Lan, & Lechtenberger, 2010, p. 413). A student’s disclosure of a disability can seem somewhat counterintuitive to the advanced learning and career specialization that lead students to chosen professions, financial stability, independent living. “Students

describe the process of disclosure to others on campus as challenging and often filled with uncertainty” (Scott, 2019, p. 11). The negative judgement that students may feel often comes from their interactions with instructors and staff, but can also extend to peers. In a study by the National Center for College Students with Disabilities, students noted that the use of their accommodations in academic or housing situations sometimes leads to inadvertent disclosure and questioning of circumstances by peers (Scott, 2019). Students noted that “questions from peers often go beyond curiosity to include a tone of judgement or resentment” and that other students can sometimes “challenge the legitimacy of the disability itself, particularly with less visible disabilities” (Scott, 2019, p. 13).

Some students with invisible disabilities have difficulties going into disability services offices because they were never previously classified as disabled, and they don't believe that their disability rises to the level of those with an easily visible disability (Scott, 2019). In turn, students neglect to access services because they don't believe that they need them to the extent that visibly disabled peers do. Students with mental health disorders, particularly related to stress and anxiety disorders, are far less likely to access services than visibly disabled peers because of their fear of the uncertainties related to availability, process, and potential for unintended stigma, all concerns directly related to such students' disabilities (Newman & Madaus, 2015).

2.2.3 Awareness of Services in Higher Education

Students transitioning from high school to higher education face the challenges of meeting new people, adapting to more challenging coursework, taking responsibility for their own schedules and time management, navigating financial responsibilities, and in many cases, living independently. "Many postsecondary students with disabilities express difficulty transitioning to postsecondary environments" (Banks, 2015, p. 29). In addition to the responsibilities which all non-disabled college peers undertake, students with disabilities must also know where to go to seek out and apply for disability services, provide documentation of their disabilities, and advocate for implementation of their accommodations largely on their own (Hamblet, 2014). In a study by the National Center for College Students with Disabilities, students "shared experiences where they or their friends entered college unaware that disability services or accommodations were offered in higher education" (Scott, 2019, p. 9). In addition, "seeking out needed services may be a challenge for many students with disabilities because they lack knowledge about legal rights,

about available services and about their specific disability and its impact on learning” (Newman & Madaus, 2015, p. 209).

Effective high school transition services directly relate to students being aware of and accessing disability accommodations in postsecondary schooling (Newman & Madaus, 2015). Students often fail to participate in their own transition planning, negating any knowledge of available services in higher education and any advocacy skills in accessing disability services (Banks, 2014). In addition to students’ direct involvement in transition planning, Hamblet (2014) advocates for transition services to include teaching advocacy skills, providing documentation for disability services offices, encouraging independence, teaching organization skills, and educating students about the strengths and needs of their disability. Students with cognitive disabilities may require an even higher level of transition services during their high school years, in order to understand and access available accommodations in postsecondary schooling (Newman & Madaus, 2015). “There is much that high school individualized education program (IEP) teams and special education faculty and staff members can do to give students the preparation they need” to successfully access disability services in postsecondary schooling (Hamblet, 2014, p. 54).

Disability service providers may be inclined to promote services in order to foster an inclusive campus. However, outreach by disability services providers can be challenging as there is little research about effective means of reaching, educating, and encouraging students to access available services, particularly those who are reluctant to self-identify (Harbour & Greenberg, 2017). In addition, disability service providers are cautious with the legalities and confidentiality associated with legislative measures such as HIPAA and FERPA, making promotions and outreach much more challenging. “Institutions of higher education, unlike primary and secondary schools, are not required to take affirmative action in seeking out and identifying students with disabilities”

(Barnard-Brak, Lan, & Lechtenberger, 2010, p. 412). General promotion of disability services through college visits, admissions offices, registration, orientation, and activities and events can help to inform students of services and contacts, and to promote a culture of inclusion for students with disabilities.

2.2.4 Post-Secondary Stigma

Though legislation and disability rights have advanced, access and inclusivity have not become fully met or adopted by all in school communities. Campuses may not be welcoming or inclusive to students (or anyone) with disabilities “due to ableist attitudes about disability, as well as curricular, programmatic, and policy barriers” (Harbour & Greenberg, 2017, p. 4). Given that many people lack regular direct interaction with individuals with disabilities, perceptions can be formed by stereotypes and third-party communications, rather than genuine experiences and relationships (Munyi, 2012, p. 6). Though many faculty are open to providing accommodations to students with disabilities, “almost half had little or no knowledge of legislation pertaining to postsecondary students with disabilities” (Zhang, Landmark, Reber, Hsu, Kwok, & Benz, 2010, p. 277). Rao and Gartin (2003) note that though some faculty express dissatisfaction with providing accommodations for students with disabilities, most would comply when a diagnosis was confirmed and services warranted. Interestingly, “non-tenure track faculty had a significantly better attitude and higher level of understanding for the need to provide accommodations” (Rao & Gartin, 2003, p. 48). Very little literature has focused on the attitudes of non-disabled students towards students with disabilities.

Postsecondary institutions are prohibited from discrimination against students with disabilities under Section 504 of the Rehabilitation Act of 1973 and the Americans with

Disabilities Act of 1990 (U.S. Government Accountability Office, 2009). However, the high level of inclusivity that students generally experience in K-12 schooling may not be to the same standard in higher education (Wolanin & Steele, 2004). According to the National Joint Committee on Learning Disabilities (1994), “many students with learning disabilities do not consider postsecondary options because they are not encouraged, assisted, or prepared to do so,” (p. 1) but notably, the number of students attending postsecondary institutions over the last 25 years has increased. “Although the gap in achievement is improving between those with disabilities and their peers, students with disabilities are underrepresented among those graduating from college” (Wolanin and Steele, 2004, p. 20). Strong academic preparation coupled with thorough transition services are essential for opportunities in higher education for students with disabilities (Wolanin & Steele, 2004).

2.3 Factors Which Shape Disability Services

With legislation and case law defining the basic requirements of disability services in higher education, the culture, expertise, and resources of each individual institution determine the level of inclusivity and services for students with disabilities. Qualifications of disability service providers, priority to professional development for faculty in working with students with disabilities, and available disability staffing and resources can vary significantly among colleges and universities. While it may be difficult to locate disability services offices in some colleges, others proudly tout their inclusivity efforts.

2.3.1 Guiding Legislation

“In parallel with educational, social, technological, and legal changes in higher education, disability services has evolved rapidly, with professionals addressing increasingly complex issues on their campuses” (Madaus, 2011, p. 5). Various acts of legislation have played a significant role in the type and level of services currently provided by disability service providers. The earliest legislation for students with disabilities in higher education began in 1864 with a bill signed by President Lincoln for the inception of the National Deaf-Mute College, a division of Columbia Institution for the Deaf and Dumb, directed by Edward Gallaudet (Madaus, 2011). The National Deaf-Mute College later became Gallaudet College in 1894 and Gallaudet University in 1986. Other early legislation includes the Vocational Rehabilitation Act of 1918 and Serviceman’s Readjustment Act of 1944, also known as the G.I. Bill. The Vocational Rehabilitation Act of 1918 was passed after World War I to provide some veterans with educational assistance (Madaus, 2011). In 1944, congress passed the G.I. Bill, which was also specifically focused to providing educational assistance for military veterans. The G.I. Bill significantly impacted college campuses due to the need for services for a rapid increase in the number of students with disabilities (Madaus, 2011).

Between 1973 and 1990, disability services in higher education changed significantly with the passing of two historical pieces of legislation. Section 504 of the Rehabilitation Act of 1973 “was the first legislation instituted addressing individuals with disabilities’ access to postsecondary education” (Greenberg, 2017, p. 1). Section 504 is a federal law which requires the development of a plan to implement reasonable accommodations which provide the means to an education comparable to students without disabilities (Disability Rights Education & Defense Fund [DREDF], n.d.). This law applies to programs and activities receiving federal financial assistance,

including public and private colleges. In 1990, the Americans with Disabilities Act was passed to both prohibit discrimination against individuals with disabilities, and more specifically to higher education, provide equal access to educational programming for students with disabilities. Title II of the Americans with Disabilities Act “prohibits state and local governments (such as public school districts, public colleges and universities, and public libraries) from discriminating against persons with disabilities” (U.S. Department of Education, n.d., p. 1). Both the Rehabilitation Act of 1973 and the Americans with Disabilities Act impacted college campuses’ need for expansions to disability services.

The year 2008 brought two additional legislative acts, further shaping access to students with disabilities in higher education. The Higher Education Opportunity Act of 2008 (HEOA) contains several provisions which aim to increase access to colleges and universities for students with disabilities. Provisions within the HEOA target funding for students with disabilities (some specific to students with intellectual disabilities), as well as expanded access to minority students with disabilities (Madaus, Kowitt, & Lalor, 2012). Also passed in 2008 was The Americans with Disabilities Amendment Act of 2008 (ADAAA), largely to address some of the limiting provisions of the original Americans with Disabilities Act. “Included was clear language related to the definition of disability, expanded examples of what constitutes a disabling condition, and the clarification of impact of mitigating measures in making eligibility determinations” (Madaus, 2011, p. 11). The ADAAA now defines a disability as “a physical or mental impairment that substantially limits one or more major life activities” (U.S. Equal Employment Opportunity Commission [EEOC], n.d.). This definition expands eligible disabilities to many diagnoses which were previously not acceptable for disability accommodations in higher education including mental health conditions and invisible disabilities.

The primary governing organization for the enforcement of legislation surrounding disability services in higher education is the Office for Civil Rights. “The mission of the Office for Civil Rights (OCR) is to ensure equal access to education and to promote educational excellence throughout the nation through vigorous enforcement of civil rights” (U.S. Department of Education, n.d., p. 1). The OCR enforces several federal civil rights laws which prohibit discrimination, including discrimination on the basis of disability as prohibited by Section 504 of the Rehabilitation act of 1973 and Title II of the Americans with Disabilities Act (Disabilities Opportunities, Internetworking, and Technology [DO-IT], 2019). The OCR accepts complaints from individuals who believe they have been discriminated against on the basis of their disability by an individual or institution, providing technical assistance, investigative services and compliance measures (DO-IT, 2019). The American Civil Liberties Union [ACLU] (n.d.) also reaffirms the rights for students with disabilities, highlighting prohibited discrimination against students with disabilities and the requirement of schools to provide accommodations to ensure equal access to educational services. The ACLU offers the opportunity to share concerns and complete an online feedback form, but cautions of the high volume of concerns that are received. Beyond the OCR and ACLU, due process and civil cases are filed regularly against higher education institutions and disability service providers for discrimination and accessibility complaints. The subsequent case law, including high profile cases, also shapes the policies and practices of colleges and universities relative to disability services.

2.3.2 Professional Development for Faculty and Staff

In general, it is fairly well-understood that specific qualifications don’t exist for becoming a college professor or instructor. A master’s degree may be acceptable for faculty in some

institutions, while a doctoral degree is required by most institutions, particularly when an instructor aspires to become a tenured professor (Princeton Review, n.d.). The subject area of the degree generally depends on the content being taught by the instructor (study.com, n.d.). Teacher.org (n.d.) notes that college professors should also “have excellent verbal and communication skills, enthusiasm, self-confidence, willingness to mentor students, a high level of knowledge, and be well organized” (p. 3). Notably absent from the qualifications and recommended characteristics for becoming an instructor in higher education are degrees in education (teaching competencies) and qualifications for working with students with disabilities.

The Association on Higher Education and Disability (AHEAD) publishes Program Standards and Performance Indicators, Professional Standards, and an Ethics Statement for disability service providers. They also reflect comprehensive programming, building capacity in the disability community, constantly adapting to changing technologies and instructional practices, and assertive advocacy for students (Association on Higher Education and Disability, n.d.). AHEAD is generally accepted as the primary authority and resource provider for disability service professionals nationally. The National Center for College Students with Disabilities also outlines a model for disability services, focusing on a mission of inclusion. “The most commonly mentioned support (by students with disabilities) was the connection students experienced with disability resource office professionals” relative to accessing and effectively utilizing disability services (Scott, 2019, p. 16). Though these resources provide guidance to model disability services practices, there is very little research or practice which lends to guiding professional development for staff in institutions of higher education relative to disability resources. AHEAD provides various opportunities for professional development, but comprehensive professional development programs are otherwise scarce.

Professional development for instructors tasked with working with and accommodating students with disabilities in higher education is largely undefined and often overlooked. In addition, some instructors resist the notion of providing accommodations for students at the college level. A survey about the attitudes of faculty for providing disability related accommodations found that most faculty would provide accommodations when necessary, but that some were dissatisfied with requests for services and felt that the disability services office should take a more active role rather than involving faculty (Rao & Gartin, 2003). One notable instructional practice within the disability services community is the instructional methodology of Universal Design for Learning (UDL). Universal Design for learning “incorporates adaptability, flexibility, and pre-emptive planning to ensure all aspects of a class...are inclusive and responsive to students’ needs” (Lombardi, McGuire, & Tarconish, 2018, p. 398). Universal Design for Learning is commonly associated with disability services and commonly linked to the concept of differentiated instruction, a practice very familiar to P-12 educators. Professional development for Universal Design in higher education lends to awareness, action, and progress by instructors relative to providing services for students with disabilities, as well as generally widening instructional practices beyond traditional lecture.

2.3.3 Resources and Expenses for Disability Services

As the number of students with disabilities in higher education continues to grow, as well as the number of students accessing disability services, so do the resources needed to ensure access and inclusive practices by institutions of higher education. Disability services offices can be understaffed and often overwhelmed by requests for accommodations, particularly in smaller colleges (Grasgreen, 2014). Given federal requirements and ongoing case law, the provision of

comprehensive disability services is not optional. “Access to higher education for the disabled is no longer a utopia, and concern about provision for them is taking on a high profile” (Ebersold & Evans, 2003, p. 8).

In addition to federal regulations, case law has played (and will continue to play) a significant role in defining responsibilities for the provision of disability services. Rose (n.d.) outlines nine court cases which have helped to shape the practices for disability services in higher education today. Cases of note include *Southeastern Community College v. Davis*, *Wynne v. Tufts University School of Medicine*, and *the Ohio Civil Rights Commission v. Case Western Reserve University*. Various aspects of providing disability services are rooted within these and other cases, including justifying accommodations, the definition of “otherwise qualified,” reasonable accommodations, course substitutions, undue burden, program requirements, and academic standards (Rose, n.d.). A separate recent lawsuit involving fifty colleges was filed over the accessibility of their websites. Jason Camacho, a blind individual from New York, filed the lawsuits after encountering barriers with the colleges’ websites while using a screen reader (McKenzie, 2018).

Significant efforts, resources, and costs are needed to be a fully accessible institution, including physically accessible facilities, sign-language interpreters, and the provision of many other academic accommodations (Davis, 2015). Costs include staffing, test-readers, test proctors, note-takers, assistive technology, resources, and ongoing professional development to remain current with case law, trends and necessary practices. Colleges have found accessibility to be difficult to achieve, ongoing, and costly to the extent that some colleges initially hired lobbyists and initiated lawsuits to attempt to prevent the initial tenets of the Americans with Disabilities Act from taking effect (Davis, 2015). Higher education institutions with budget challenges are in a

difficult position as costs rise for the increasing populations of students with disabilities, anticipating the defense of “undue burden” in continuing disability lawsuits (Rothstein, 2018). In addition, higher education institutions are subject to the loss of federal financial support for failing to meet basic legal requirements defined in the Americans with Disabilities Act and the Rehabilitation Act of 1973 (Grossman & Smith, 2015). Unequivocally, “college campuses are faced with new issues related to providing services for an increasingly diverse student body, including ensuring access to evolving technologies, to quality instruction, and to appropriate support services” (Madaus, 2011, p. 13).

2.4 Conclusion

Despite a slow historical start to the access of students with disabilities into higher education, notable advances have taken effect over the last 30 years. Advances involve legislation and case law, progressions of public perception, expansions of diagnoses, and advanced technologies and instructional practices in education which require accommodations for accessibility. Concerns relative to inclusive disability practices include lingering stigma by peers and college staff, a lack of resources allocated to disability service providers, non-inclusive instructional practices, and professional development needed for all staff to keep current with the advances in technology and qualifying conditions. Also of note is the disparity between practices and accommodations in high school and higher education and the responsibility shift for accessing disability services to beginning college students who are already at a significant disadvantage to their non-disabled peers.

The inclusion of invisible disabilities to qualifying disability conditions, largely as a result of the Americans with Disabilities Amendment Act, changed the definition of “disability” and the landscape of providing disability services in higher education. With the large majority of students with disabilities now unknown to college staff and faculty, the manner in which services are accessed, promoted, and implemented has become a much more complex process than when disabilities were more traditionally visible and/or physical.

As disability services has become a critical component to student affairs, disability service providers have become challenged to new learning, advancing practices, facilitating professional development, and working to promote a culture of inclusivity. Faculty can benefit from professional development related to inclusive instructional practices, invisible disabilities, and ensuring that course content is accessible to all students. As progressions continue within the field of disability services, these measures can lend to providing equity to students who often encounter barriers to educational programs, which are out of their control due to their disabilities.

3.0 Study Methods and Design

3.1 Introduction

As a Student Success Coach at Butler County Community College (BC3), I am responsible for providing various student services including tutoring, retention interventions, disability services, and success coaching, which means assisting students with anything that can interfere with their academic success. I have been in this position for over a year and at BC3 for two years as an instructor, Student Services Specialist, and now Student Success Coach. Prior to my work at BC3, I served as a secondary level teacher and principal for 22 years. There are many interrelated structures and services between my previous and current work, but the differences between serving students with disabilities in high school and the college level has been an intriguing part of my responsibilities. Disability services in high school and higher education are extremely different, constantly changing, and somewhat undefined. My own recent professional learning and understanding of disability services at the college level has been extensive, prompting questions about how effectively and willingly students are to make the same transition.

Grasgreen (2014) notes that “students with disabilities say the ignorance of faculty and staff members makes it difficult to get the help they need -- and in some cases, makes them less willing to disclose their condition” (p. 1). As a professional responsible for providing disability services, I am often concerned that faculty and staff aren’t familiar with or receptive to students with disabilities and the requirements for providing accommodations. In addition, new college students are often insecure about navigating the new procedures for accessing accommodations in a system very different from those they had grown accustomed to in high school (Grasgreen,

2014). It was therefore of significant interest to me as a disability services provider to determine if the same sentiment existed from students to whom I provided disability services, as well as what we are doing well and can improve upon as disability service providers in general.

The purpose of this study was to examine students' perceptions and utilization of disability services, strengths and needs of disability services, and potential relationships between disability needs and services with retention and graduation. Chapter 3 reviews the context of the study, research questions, study design and methods, and the intended analysis of survey and focus group data.

3.2 Context of the Study

The review of literature in chapter two raises many questions and concerns related to providing disability services in higher education. From variations in defining disability, to slow historical changes in accessibility practices, to high profile case law which continuously alters current rights and services, it is difficult to define the policies, practices and structure of a model program for disability services. Lieberman (2019) notes that “many colleges and universities still lack coherent policies around accessibility, and those that have them sometimes struggle to enforce or define them across the entire university” (p. 1). As a practicing disability services provider, I have encountered various uncertainties of available services, questions about college-level accommodations, and apprehensions for accessing services. Some students are unaware that disability related accommodations are even available in college, while others don't know how to access services and/or are uncertain about the fallout from accessing services in a new and unfamiliar environment where stigma could work against them. Students with disabilities are also

widely unaware of their legal rights, as well as the manner in which their disabilities can adversely impact their learning (Newman & Madaus, 2015). Though many students access and effectively utilize disability services, it is often speculated that many students eligible for services choose to forego them for various reasons. In some cases, students apply for services only after having academic difficulties, such as failing courses or being placed on academic probation or suspension. Harbour and Greenberg (2017) recognize that little is known about the effectiveness of various interventions or even how to conduct outreach to students who are apprehensive to access disability services. This study aimed to discover the strengths, needs, barriers, and apprehensions of students relative to registering and utilizing disability services through the Office of Access and Disability Resources at Butler County Community College.

3.2.1 Disability Needs Affecting Learning in Higher Education

The purpose of providing disability services in higher education is to remove barriers which prevent accessing equitable educational services for individuals with disabilities. As noted previously, the Americans with Disabilities Act defines a disability as “a physical or mental impairment that substantially limits one or more major life activities” (U.S. Equal Employment Opportunity Commission [EEOC], n.d.). Attending college and successfully meeting all of the responsibilities associated with college coursework is without question a major life activity, whether students are attending on a part-time or full-time basis. Students with disabilities are additionally challenged to overcome the specific areas of their condition which adversely impact their learning in higher education. Some students choose to assume this responsibility alone, while others opt to utilize the services and accommodations available to them. In order to provide optimal services to students, it is important to know the reasons why students choose to access

disability services, why students choose not to access services, the frequency of use of accommodations and services, and how to make improvements relevant to students' needs which further lend to accessing services.

3.2.2 Institutional Context Generally and in Relation to Disability Services

According to the mission statement of Butler County Community College, BC3 is dedicated to providing educational opportunities that are “accessible and responsive to the needs of the communities we serve.” Also included is the commitment to offering a “supportive, student-centered environment” at the college. I have found these published values to be genuine in nature at BC3, as my work with students with disabilities has been supported by the highest-level administrators and positively recognized on several occasions. I find the work of the Office of Access and Disability Resources to be valued and encouraged, and therefore saw significant meaning in conducting a study relative to our students' perceptions of disability services at BC3.

The enrollment for the spring 2020 semester at BC3 was 2,215 students across six campuses. Campuses are located in Butler (main campus), Ford City in Armstrong County, Brockway in Jefferson County, Cranberry in southern Butler County, New Castle in Lawrence County, and Hermitage in Mercer County. Across the six campuses, there were 218 students registered with the Office of Access and Disability Resources, accounting for 9.8% of all students. The Office of Access and Disability Resources employs three staff members. The Coordinator of ADR reports to main campus on a full-time basis, where 135 students were registered for services. The caseload of the coordinator encompassed most of the students at main campus and all students at the Brockway campus, where there were 6 students registered for accommodations. Two student success coaches report to the remaining four campuses and main campus to support

students with disabilities. As one of the two success coaches, I report to the Ford City campus one day each week, Cranberry campus one day, and main campus three days each week to assist the coordinator, as well as fulfill responsibilities in the areas of retention, tutoring, and success coaching at all three campuses. My caseload of students registered for disability services consisted of 38 students at Ford City and Cranberry, and approximately 12 students at main campus. The second Student Success Coach reports to the New Castle campus three days each week, Hermitage two days, and comes to main campus every other Friday for bi-monthly retention meetings. Her caseload consisted of 39 students registered for services, as well as responsibilities at New Castle and Hermitage associated with retention, tutoring, and success coaching. A breakdown of the number of total students and students registered with disability services at each campus of Butler County Community College can be found in section 3.5.1, the Student Survey Population.

As previously noted, the U.S. Department of Education (2019) reported in 2015-2016 that 19.4% of undergraduate students nationally reported having a disability. Assuming a higher ratio of students with disabilities attending community colleges than four-year colleges, it was my belief that this number would be higher if the study mentioned above had been limited to community colleges. Notwithstanding, if there are approximately 19.4% of students on BC3 campuses who qualify as disabled, questions arose as to why 9.6% or nearly half of these students (213 students) were not registered with the Office of Access and Disability Resources.

3.3 Research Questions

The following research questions were examined within the scope of the study design and methods:

1. What are the students' perceptions of their disability-related needs and existing institutional services?
2. How do students perceive their disability needs and institutional services might impact their enrollment or graduation trajectories?

3.3.1 Discussion of Research Question

Disability service providers speak with students on a regular basis about their disabilities and the specific accommodations which provide accessibility to equal educational opportunities in higher education. Through these discussions, we were able to assess and adjust the services provided by the Office of Access and Disability Resources. However, rarely did we conduct wide-scale inquiries of students which focus on effective and ineffective institutional policies and practices as related to disability services. Considering some ignorance of faculty and staff noted by students relative to their willingness to access accommodations and services (Grasgreen, 2014), it was important to investigate students' perceptions and recommendations for services intended to address their needs.

The first research question examined students' perceptions of their disability-related needs and the existing services offered at BC3. The question prompted students to assess (rather than

simply identify) their needs and services in a manner which aims to identify strengths and needs of current institutional practices. The intention of the question was to encourage students to think more critically of their needs, identifying concerns and constructing suggestions which lend to improvement planning.

The second research question examined the relationship between students' perceptions of needs and existing disability services, with their continued enrollment in and ultimate graduation from BC3. As challenging as the demands of college coursework can be, the additional challenges faced by students with disabilities may tip the scales between persevering towards a degree or dropping out of college entirely. This question aimed to gain a better understanding of factors that may determine the tipping point between meeting and abandoning the challenges of college for students with a disability.

3.4 Data Collection

3.4.1 Introduction of Methods

This study of students' perceptions and use of disability services at Butler County Community College was conducted in two parts, a survey instrument and follow-up interviews. The survey was administered online to all students registered with the Office of Access and Disability Resources in the spring semester of 2020. The survey consisted of both closed-ended and open-ended questions. More specific details of the construction of the survey are explained in the next section. As part of the administration of the survey, respondents were asked if they were willing to voluntarily participate in more in-depth individual follow-up

interviews. The interviews included open-ended questioning designed to elicit students' more detailed insights and attitudes towards the use and benefits of accessing disability services (Menter, Elliot, Hulme, Lewin, & Lowden, 2011). A general summary of survey responses was shared with interview participants to help provide the basis for interview questions and further discussion. Incentives were offered to students in the form of a raffle for gift cards for participation in the survey and an additional raffle for students participating in interviews.

3.4.2 Data Collection and Analysis

Table 3-1, on the following page, provides a general depiction of the two research questions in this study. Included in the table are the study methods, data collection, and planned analysis corresponding to each research question.

Table 3.1 Data Collection and Analysis

<i>METHOD</i>	<i>PARTICIPANTS</i>	<i>DESCRIPTION</i>
Survey. Survey of students currently registered with the Office of Access and Disability Resources at Butler County Community College. Purposive, total population sample. Closed-ended and open-ended questioning.	All students registered for disability- related accommodations with the Office of Access and Disability Resources at all BC3 campuses during the spring semester of 2020. 218 total students.	<ul style="list-style-type: none"> - Survey of students with closed-ended and open-ended questions using Qualtrics survey software - Focus on students' interactions, perceived strengths and needs, and reasons for registering with disability services - Data collected using the Qualtrics survey software - Statistical analysis of closed-ended questions using frequencies, frequency percents, and cross-tabulations of data across sub-groups - Qualitative analysis of open-ended responses through coding

		<ul style="list-style-type: none"> - Analysis to identify response patterns and emergent themes in perceptions of disability needs and current disability services
Interviews. Voluntary participation by students who completed the survey. Students provided general survey results to inform interview questions. Questions, responses, and discussion to be recorded.	Any students volunteering to participate in individual interviews upon completion of the student survey.	<ul style="list-style-type: none"> - Interview prompts constructed from response patterns and emergent themes of survey responses - Share general survey response with students participating in interviews - Improvement-focused questioning of students' perceptions and attitudes of how their experiences with disability services impact enrollment and graduation trajectories. - Additional prompts guided by patterns and themes identified from students' responses during the interviews - Notes taken during interviews and recorded using voice memos - Qualitative analysis through coding of open-ended questions and discussion

3.5 Student Survey

This study focused on perceptions and feedback from students, given that students in colleges and universities are fully responsible for both accessing and utilizing their disability services and accommodations. The student survey (refer to Appendix A) examined students' basic perceptions and experiences with the disability services office, known as the Office of Access and Disability Resources (ADR) at Butler County Community College. In its final stages of development, the survey was piloted by two former students who utilized disability services while attending classes at BC3, as well as the Coordinator of Access and Disability Resources, the Dean

of Student Development, the other Student Success Coach, this researcher's adviser, and the Director of Student and Faculty Engagement at the University of Pittsburgh who provides students with expertise on use of the Qualtrics survey program. Feedback from the pilot surveys included clarity of wording, gender current responses, functionality of re-directions, making certain questions optional and others required, and separating main campus facilities from off-campus facilities because of their significant differences.

Prior to sending the survey, students received an email providing preliminary notification of the survey. This notification informed them of the purpose and importance of the survey, timeline of the survey, and incentives for completing the survey. The notification, timeline, purpose, and incentives were largely designed to increase response rates, as well as emphasize the meaning and importance of the study (Menter et al., 2011).

The survey was emailed to students using the Qualtrics survey software. The survey included instructions for completion of the closed and open-ended prompts, as well as a deadline for completing the survey. Between the date of emailing the survey and the deadline to complete the survey, two reminder notices were sent to students to encourage completion of the survey. The first reminder notice was sent one week prior to the deadline for completion of the survey and the second notice was sent three days prior to the deadline. Students electronically submitted the survey immediately upon completion of the survey. Following the deadline date of the survey, all students who completed the survey were entered into a random drawing for gift cards. Upon completion of the survey, students were redirected to a separate link, asking for their names and email addresses in order to be eligible for the gift card drawing. The redirected link removed the ability to personally identify students' survey responses. At the conclusion of the survey, students were also be invited to voluntarily participate in the second part of the study, individual phone

interviews. A redirected link was again utilized to avoid identification of survey responses to students who agreed to participate in interviews. This function was explained and reinforced to students on the initial directions for the survey (refer to Appendix A), and again prior to asking for students' names and email addresses.

3.5.1 Student Survey Population

The survey was sent to the 218 students across the six BC3 campuses who were registered with the Office of Access and Disability Resources in the spring semester of 2020. Gender and students' primary campus of attendance were included in the population data file. Additional demographic subgroup information was unavailable to this researcher primarily due to FERPA and accessibility stipulations. The survey included questions pertaining to type of disability, credits earned, enrollment date, date of registration with the disability services office, and frequency of visits with disability service providers per semester. This supported further exploration of data across these categories. Table 3-2 below depicts the total enrollment at each campus and the number of students in the spring 2020 semester registered for disability services in the "ADR" column. These students represent the survey population. The table also shows the percentage of students registered for disability services at each campus, as well as the gender of registered students.

Table 3.2 Spring 2020 enrollment and students registered with the Office of Access and Disability Resources (ADR)

<i>Campus</i>	<i>Enrollment (n)</i>	<i>ADR (n)</i>	<i>ADR Percent of Enrollment</i>	<i>ADR Female (n)</i>	<i>ADR Male (n)</i>
Butler	1364	135	9.9%	77	58
Cranberry	251	28	11.2%	18	10
Lawrence	222	18	8.1%	11	7
Linden Pointe	151	21	13.9%	12	9
Brockway	137	6	4.3%	6	0
Armstrong	90	10	11.1%	8	2
<i>All Campuses</i>	<i>2215</i>	<i>218</i>	<i>9.8%</i>	<i>132</i>	<i>86</i>

*students may be taking classes at multiple locations

This purposive total population sample was designed to examine the attitudes and experiences of all students sharing the qualification of being registered with a disability at BC3 (Crossman, 2019). Table 3-3, on the following page, links conceptual items to be included within the survey with the research questions and supporting literature.

Table 3.3 Relation of survey questions to overriding research questions

Research Question	Survey Item	Supporting Literature
1. What are the students' perceptions of their disability-related needs and existing institutional services?	#8 - Students' ratings of interactions with the Office of Access and Disability Resources. #11 - Students' ratings of academic accommodations. #12, #13 - Students' ratings of accessibility to campus facilities. #15 - Students' ratings of experiences with instructors. #16 - What more do instructors, staff, and advisors need to know about disability services? #17 - Should more information about disability services be made available/promoted to students?	Barnard-Brack, L., Lan, W. & Lechtenberger, D. (2010). Davis, L. (2015). Grasgreen, A. (2014). Harbour, W.S., & Greenberg, D. (2017).

	#19 - What improvements could be made to disability services?	Hong, B. (2015). Lombardi, A., McGuire, J., & Tarconish, E. (2018).
2. How do students perceive their disability needs and institutional services might impact their enrollment or graduation trajectories?	#18 - Do you feel that your disability needs impact your continued enrollment at BC3 in either a positive or challenging manner? #18a - How is your disability impacting your continued enrollment at BC3? - Student interviews will inquire deeper into RQ #2.	Newman L., & Madaus, J. (2015). United States Government Accountability Office. (2009).

3.6 Student Interviews

The last question of the student survey asked students if they would be willing to voluntarily participate in an individual interview. The objective of the interviews was to seek more detailed insights, attitudes, and experiences of students in personable phone conversations. The one-on-one nature of the interviews lent to more candid responses to questions which can be sensitive in nature in open settings. The interviews more deeply inquired about students' needs and perceptions of disability services at BC3, particularly related to the impacts on enrollment and graduation trajectories to inform the improvement of services. Following completion of the survey and initial analysis of the survey responses, students were contacted by phone in random order to conduct interviews. Also following the student survey, questioning was developed by analyzing survey responses, identifying emergent patterns, and identifying areas of needed clarity or further exploration. A limited set of follow-up discussion prompts were constructed and asked as a result of responses during the interviews. The interview script and questions can be found in Appendix C.

Given the potentially sensitive and stigmatized nature of discussing disability related subject matter, caution was taken with the wording of questions and phrases within the interviews. The interviewer created a comfortable and positive tone to questions and discussions, sensitive to the needs of students with disabilities and conducive to open, honest dialogue. Incentives for participation in interviews included an additional drawing for gift cards. Careful notes were taken during the interviews and interviews were recorded using voice memos with students' permission, in order to support subsequent thematic coding.

3.6.1 Interview Sample

As noted previously, students participating in interviews were those who respond affirmatively to the last question of the student survey, "We hope that students completing this survey might also be willing to participate in individual phone interviews using a remote platform, in order to further explore students' thoughts and perceptions about disability services. Would you be willing to participate in an individual phone interview?" Students interviewed participated strictly on a voluntary basis.

3.7 Data Analysis

This research study sought the perceptions of students relative to disability services at Butler County Community College. As such, it was essential (but at times difficult) for the researcher to dismiss personal perceptions and experiences during analysis of data collected from the student survey and individual interviews. As data was collected using these two means of

inquiry, analysis was inductively driven in order to allow themes and concepts to emerge directly from and aligned with the collected data. Table 3-4 demonstrates the variation of depth between questioning in the student surveys and the individual interviews.

Table 3.4 Objectives for survey and interview questions
(Specific interview questions will be constructed following analysis of survey responses.)

<i>SURVEY</i>	<i>INTERVIEWS</i>
Demographic information. <i>Questions 1-4, 9.</i>	No follow-up.
Knowledge and use of availability of disability services. <i>Questions 5-7.</i>	Perceived benefits, issues, and concerns with use of disability services.
Quality of experiences with disability services office. <i>Question 8.</i>	Overall impressions, strengths, and needs. with the disability services office. Challenges and complexities.
Accessibility and benefits of accommodations. <i>Questions 10-11.</i>	Perceived level of accessibility with implemented accommodations.
Level of campus accessibility. <i>Questions 12-13.</i>	Strengths, needs, and suggestions for more accessible campus accessibility.
Experiences with instructors. <i>Questions 14-16.</i>	Students perceived interactions with instructors relative to their disability needs.
Promotion of disability services. <i>Question 17.</i>	Suggestions for making disability services at BC3 better known and understood.
Disability services relative to continued enrollment and graduation. <i>Questions 18-19.</i>	Perceptions of the impact of disability services on continued enrollment. Improvement areas.
Participation in individual interview. <i>Question 20.</i>	Not applicable.

Data from the student survey was analyzed both quantitatively and qualitatively. Subgroups from the student surveys were analyzed to note any distinguishing variations. Possible subgroup analysis included consideration of experiential differences across campuses, and differences across disability classification. Quantitative data was reviewed via basic descriptive statistics, such as frequency, frequency percents, mean, median, and cumulative frequency percents. Literature-driven coding was utilized for qualitative data, from which patterns and concepts were highlighted and utilized as the basis for interview questioning. A schematic was developed to display themes and emerging patterns and concepts. An inductive coding scheme was utilized to analyze interview data, as the study intended to “develop theory, rather than describe a particular phenomenon or verify an existing theory” (Zhang & Wildemuth, n.d., p. 3). Interview notes were reviewed and analyzed qualitatively. Coding was again utilized to identify perceived strengths and improvement areas for disability services. The coding schematic was developed from notable ideas, concepts, and patterns. Category development was used to demonstrate emerging themes within students’ responses, while making certain that the individual experiences and perceptions of students remained essential to analysis and implications. Direct quotes from students’ responses were categorized into themes for each primary question of the interview, in order to examine their significance relative to the research questions.

3.8 Conclusion

The purpose of the study was to seek feedback from students who utilize and depend upon disability services at Butler County Community College. These students share the challenge of overcoming a condition which affects their daily life activities, in order to achieve academic

success in higher education. As college study is challenging enough for non-disabled students, it is essential that the Office of Access and Disability Resources facilitates services which provide equitable educational access to students with disabilities.

The goal of the study was to identify strengths, needs and improvement areas to disability services through the eyes of the students who depend on them, in order to maintain their enrollment and projected graduation from BC3. Results of the study will be shared with staff and administration as a basis for action steps and improvement planning.

4.0 Analysis of Data

The research study consisted of two phases of inquiry. First, student surveys were designed to address research question #1, begin to collect feedback for research question #2, and recruit students for the second phase of the research study. Survey responses produced a number of interesting findings, but few unexpected results. Generally, responses were very positive in nature, with some suggestions for areas of improvements to disability services. Survey responses were also used to construct questions for the second phase of the study, student phone interviews.

The second phase of the study consisted of recorded phone interviews of students who agreed to participate at the conclusion of student surveys. Interview questions were designed to expand upon qualitative survey responses and to more completely address research question #2. The interview format also allowed for follow-up questions in order to encourage detail of strengths, improvement areas, and experiences with disability services at BC3. Again, responses were very positive and contained few surprising responses. Students provided insight into experiences and perceptions and more detail related to suggestions for improvements than within survey responses.

4.1 Student Surveys

For the first phase of the research study, an anonymous survey link was sent to the 218 students registered with the Office of Access and Disability Resources in the spring semester of 2020 at all campuses of Butler County Community College. The first communication to students was a notification and explanation of the survey. Next, the survey link was sent to all students

with directions for completion of the survey. Two additional emails were sent to students who had not completed the survey during the initial two-week availability for survey completion. The Qualtrics Survey System was used to construct, house, and disseminate the survey. Of the 218 students to whom the survey was emailed, 106 students (48.6%) responded; 89 surveys were fully completed and 17 were partially completed. Of the 106 respondents, 33 students (31.1%) also volunteered to participate in the second phase of this research study, individual student interviews.

4.1.1 Demographic Information

Within the survey, students were first asked to provide various demographic information. Demographic information was collected to establish distinguishing variables and possible subgroups for potential analysis. Demographic information was aligned with perceptions and ratings of students to establish emergent themes and patterns. Cross-tabulations were conducted on the differentiation of survey responses relative to disaggregated demographic information in order to determine differences among sub-groups in perceptions of disability services.

4.1.1.1 Campus

The largest campus in the Butler County Community College organization is main campus in Butler. This campus produced the 69% (73 students) of survey responses. Off-campus responses ranged between 3.8%-9.4% (n=4-10) of the total responses, across 5 additional campuses/centers. The combined off-campus response accounted for 31% (33 students) of the total number of survey responses, as shown in table 4-1 below.

Table 4.1 Students registered with the Office of Access and Disability Resources (ADR), and survey response rates (Spring 2020)

<i>Campus</i>	<i>Overall Enrollment (n)</i>	<i>ADR Enrollment</i>	<i>ADR Percent of Enrollment</i>	SURVEY RESPONSE	
				<i>Frequency</i>	<i>Frequency % of Total ADR</i>
Butler	1364	135	9.9%	73	54.1%
Cranberry	251	28	11.2%	7	25.0%
Lawrence	222	18	8.1%	7	38.9%
Linden Pointe	151	21	13.9%	10	47.6%
Brockway	137	6	4.3%	5	83.3%
Armstrong	90	10	11.1%	4	40.0%
<i>All Campuses</i>	<i>2215</i>	<i>218</i>	<i>9.8%</i>	<i>106</i>	<i>48.6%</i>

4.1.1.2 Gender

A total of 69 (65%) female students and 37 (35%) male students responded to the survey. Of the 218 students to whom the survey was initially sent, 132 are female (60.6%) and 86 are male (39.4%). This gender analysis shows consistency with both the survey participants and the total enrollment of female and male students at BC3.

4.1.1.3 Enrollment Date and Credit Completion

Students who enrolled at BC3 between 2018-2020 accounted for 73% of survey responses while 27% enrolled during or previous to 2017. As BC3 is generally acknowledged as a 2-year institution, it would be expected that the majority of students enrolled within the last two years.

The number of credits completed by responding students is depicted below in figure 4-2. This sub-group provides a relatively well-dispersed sample of students in the beginning, middle and latter stages of their degree completion at BC3.

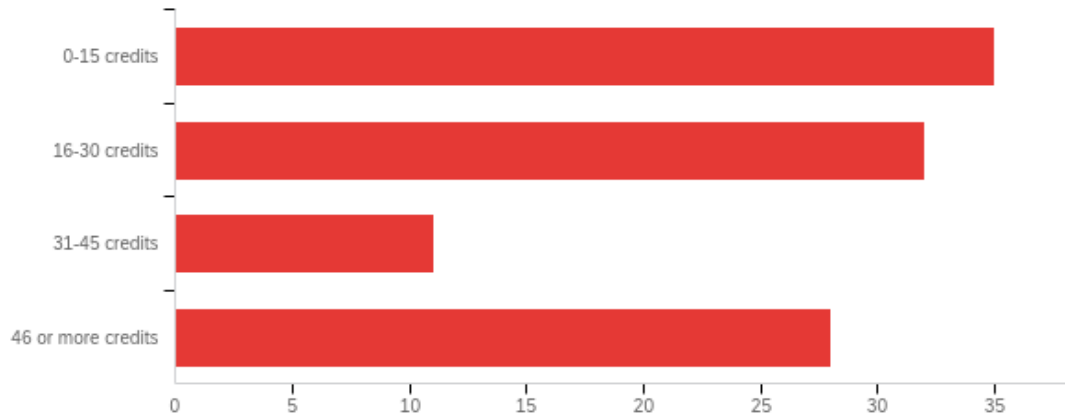


Figure 4.1 Credit completion of responding students

4.1.1.4 Awareness and Registration for Accommodations

Of the 106 students who responded to the survey, 88 students (83%) indicated that they knew that disability-related accommodations were available when they first enrolled at BC3. This response rate is very high (as shown in figure 4-3), but does not take into account the students at BC3 who are eligible for disability services but not currently registered, who may still not know that services exist. We have no way to identify this potential group.

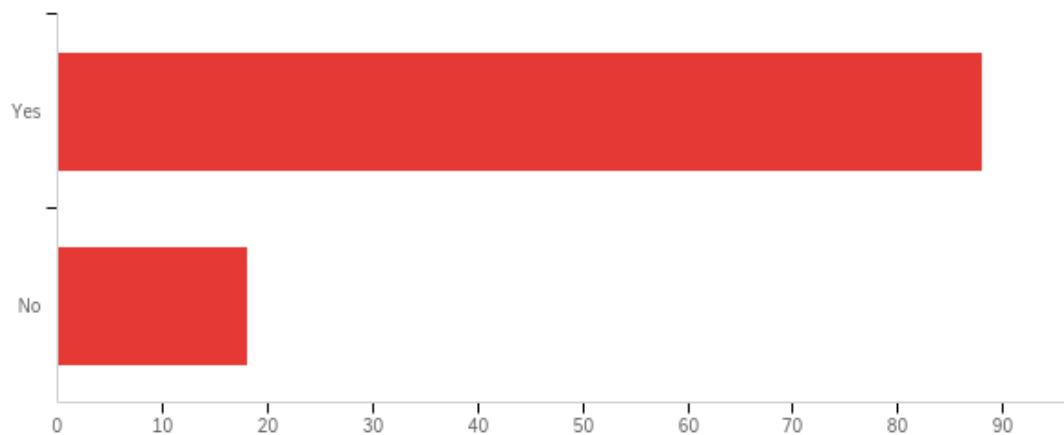


Figure 4.2 Students who came to BC3 knowing that disability services were available

Between 2018 and 2020, 80% of responding students (n=78) registered for disability services through the Office of Access and Disability Services (ADR) at BC3. Again, given that BC3 is a two-year institution, it is expected that a much higher number of students would have registered for services within the last two years.

4.1.1.5 Nature of Disability

When asked of the nature of students' disabilities, 87% of students responded that their disabilities are generally "invisible," such as learning disabilities, Attention Deficit Disorder, Attention Deficit Hyperactivity Disorder, Autism Spectrum Disorder, chronic pain, chronic health condition, mental health disorder, and anxiety. This is fairly consistent with national averages in college students across two and four-year institutions, though very different from the types of disability considered and reported prior to the inception of the Americans with Disabilities Act in 1990 and the Amendment Act in 2008. Table 4-4 shows the frequency and frequency percent of the reported disability types at BC3. Learning disabilities and Attention Deficit Disorder/Attention Deficit Hyperactivity Disorder account for nearly half (44.2%) of the different categories of disabilities. Mobility and hearing/speech/vision disabilities, those more traditionally categorized as disabilities prior to the Americans with Disabilities Act, combined to account for only 11.5% of the disabilities at BC3.

Table 4.2 Nature of students' disabilities

Nature of Disability	Frequency %	Frequency
Learning Disability	27.9%	41
Attention Deficit Disorder/ Attention Deficit Hyperactivity Disorder	16.3%	24
Mental Health Disorder	15.7%	23
Health/Chronic Condition	10.2%	15
Other	9.5%	14
Autism Spectrum Disorder	8.8%	13
Mobility	6.1%	9
Hearing/Speech/Vision	5.4%	8
Total	100.0%	147

4.1.1.6 ADR Visits

When asked about the frequency of students' visits with their disability services provider, 52% of students (n=50) responded that they visit 1-2 times each semester and 35% of students (n=34) visit their provider 3 or more times each semester. While 87% of students meet regularly, 13% of students (n=13) do not meet with their service provider as shown in table 4-5.

Table 4.3 Frequency of visits with disability service providers

Response	Frequency Percent	Frequency
Once or twice each semester	51.6%	50
3-5 times per semester	21.7%	21
Never	13.4%	13
6 or more times per semester	13.4%	13
Total	100%	97

4.1.2 Student Ratings

In the second half of the survey, students were asked to rate various aspects of services and provide their feedback via open-ended response items. Ratings and open-responses were intended to provide insight into the thoughts and perceptions of students' experiences with disability services at BC3. Responses to these items directly related to research question #1 and laid the groundwork for addressing research question #2.

4.1.2.1 Disability Services Office (ADR)

Students rated the quality of interactions with the Office of Access and Disability resources at very high levels. The services and resources that students receive in relation to their disability-related needs were also rated at very high levels. The lowest rating across listed competencies was 92% "good to excellent." These very high ratings make distinctions among services difficult to determine. The results may indicate a selection bias, where only students with a positive response completed the survey. These issues are considered more thoroughly during the second phase of the research study, student interviews. Figure 4-6 depicts the ratings for each of the competencies included in the survey item.

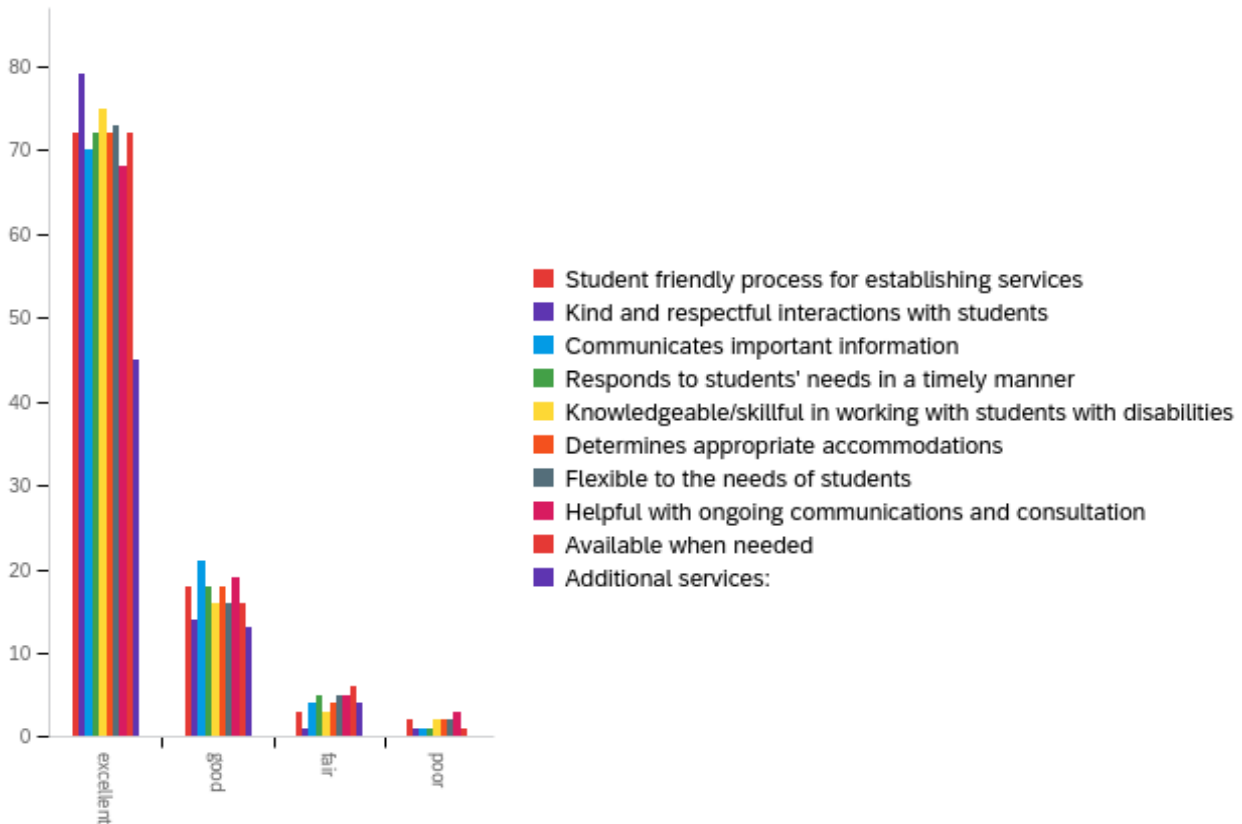


Figure 4.3 Ratings of ADR interactions and services

4.1.2.2 Academic Accommodations

Students were asked which accommodations they used at BC3 and how they rate each accommodation. The most widely used accommodations reported are test accommodations (45%) and note-taking accommodations (24%). The frequency of use of other accommodations is noted within figure 4-7 below. Overall, ratings of accommodations were very high, but of note, 11 out of 55 students (20%) using note-taking accommodations rate this accommodation as “fair” (9) or “poor” (2). Table 4-8 shows all ratings of accommodations utilized by responding students at BC3.

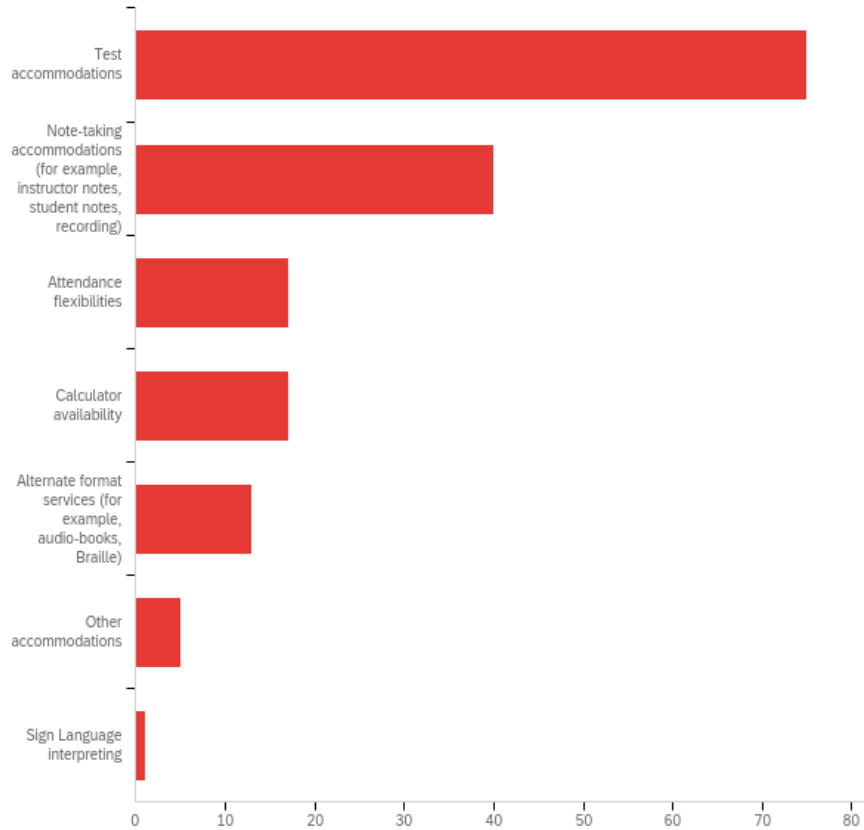


Figure 4.4 Frequency of use of specific accommodations

Table 4.4 Ratings of accommodations with frequency percents of participants

Accommodation	Excellent	Good	Fair	Poor	Not used	Total n=
Test accommodations	64.5%	16.1%	3.2%	3.2%	12.9%	93
Note-taking accommodations	36.6%	10.8%	9.7%	2.2%	40.9%	93
Attendance flexibilities	18.1%	11.7%	3.2%	2.1%	64.9%	94
Calculator availability	16.1%	12.9%	2.2%	3.2%	65.6%	93
Other accommodations	15.6%	6.3%	0.0%	1.6%	76.6%	64
Alternate format text services	13.7%	8.4%	5.3%	1.1%	71.6%	95
Sign Language interpreting	4.4%	2.2%	2.2%	1.1%	90.2%	92

4.1.2.3 Campus Accessibility

Students rated the accessibility of main campus and off-campus facilities very highly (from good to excellent). The only exception to these high ratings was parking and transportation on main campus.

4.1.2.4 Experiences with Instructors

Students responded that 39% of instructors include a statement about disability/ accommodations in their syllabus; 23% do not, 37% do sometimes. Figure 4-9 depicts these results. Currently, there is no requirement to include any information in syllabi regarding the availability of disability-related accommodations.

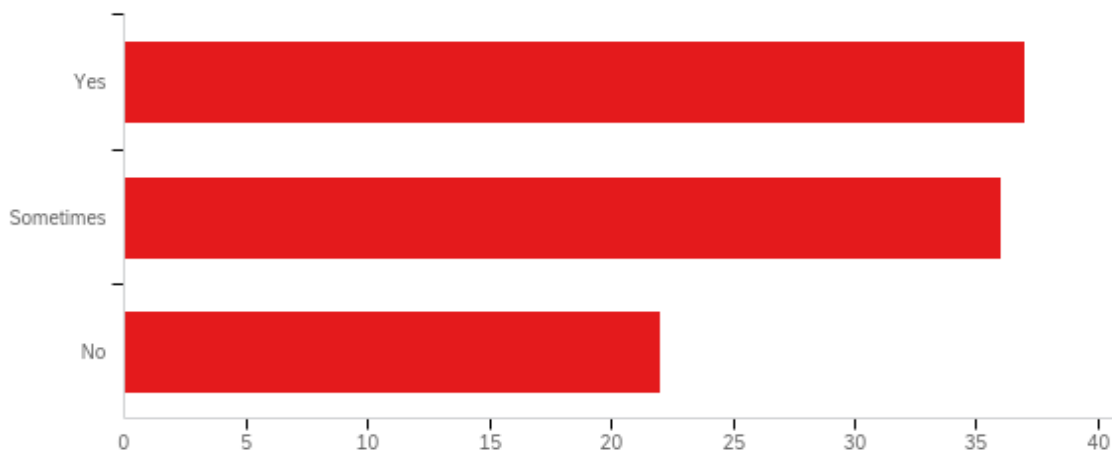


Figure 4.5 Inclusion of disability-related statement on syllabus

Overall, ratings of instructors' work with students with disabilities was very high. Ratings of students either agreeing or strongly agreeing with positive interactions with instructors ranged between 86%-90%. Of note, instructors accepting students' needs for accommodations and instructors' implementation of accommodations were the two highest ratings by students. The

calculated mean (\bar{x}) in table 4-10 shows the similarity of response patterns, indicating the need for further insight and clarification through student interviews.

Table 4.5 Ratings of disability-related interactions with instructors

Statement	(1) strongly disagree		(2) disagree		(3) agree		(4) strongly agree		mean \bar{X}	Total
My instructors are respectful and supportive of me as a student with a disability	6.5%	6	3.2%	3	45.2%	42	45.2%	42	3.3	93
My instructors are familiar with the processes for using my accommodations	6.5%	6	4.3%	4	46.2%	43	43.0%	40	3.3	93
My instructors are familiar with the disability services staff and their role in coordinating my accommodations	6.5%	6	3.2%	3	46.2%	43	44.1%	41	3.3	93
My instructors accept my need for accommodations	7.5%	7	2.2%	2	41.9%	39	48.4%	45	3.3	93
My instructors implement my accommodations	5.4%	5	5.4%	5	43.0%	40	46.2%	43	3.3	93

4.1.2.5 Additional Needs, Awareness, and Recommendations

Despite reporting earlier in the survey that 83% of students knew that accommodations were available when they first enrolled at BC3, 65% of students report that more information about disability services should be made available/promoted to students. Open-ended responses indicate that students want to know more information about how disability services can help them and how best to use services throughout their time at BC3.

Students' responses to what more instructors, staff, and/or advisors need to know about disability services at BC3 were overall very positive. Many said "nothing" or provided positive, favorable comments. A few students indicated that instructors need to be more understanding, discreet, and compassionate with students with disabilities, and another suggested a college-wide training for all staff working with students with disabilities.

4.1.2.6 Impact of Disabilities on Enrollment

When asked about their continued enrollment at BC3, 74% of students feel that their disability impacts their enrollment in some manner; either pressing them to try harder and achieve more, or in a way that threatens their continued post-secondary coursework. Of note, 26% of students feel that having a disability is motivational and 19% report that having disability-related accommodations makes it possible for them to be successful in college coursework (the highest two ratings of any listed impact). Relative to disability difficulties, 16% of students note that organization and time management issues related to their disability impact their continued enrollment and 11% report disability-related focus issues. The lowest reported impact cited (1.4%) was students not getting the disability supports needed at BC3. Table 4-11 rank orders areas most impacted by students' disabilities.

Table 4.6 Impacts of disability on continued enrollment

Statement (in rank order of agreement)	Cumulative Frequency	Cumulative Frequency %
(1) My disability motivates me to achieve my goals and continue enrollment at BC3	36	25.7%
(2) The disability accommodations I receive make it possible for me to continue to be enrolled	27	19.3%
(3) My disability causes issues with organization and time management which keep me from performing at my best	22	15.7%
(4) I can't maintain the focus needed to complete all of my work because of my disability	16	11.4%
(5) Other (please specify):	12	8.6%
(6) I can't keep up with the pace of college coursework because of my disability	11	7.9%
(7) My instructors aren't supporting my disability related needs as much as I need	4	2.9%
(8) Facilities are not as accessible as I need them to be	4	2.9%
(9) I have to miss too many classes because of my disability	3	2.1%
(10) Accessing disability related accommodations is too difficult to keep up with	3	2.1%
(11) I'm not getting all of the disability related supports that I need	2	1.4%
Total	140	100%

4.1.2.7 Improvements to Disability Services

At the conclusion of the survey, students were asked to provide suggestions for improving disability services at BC3. A review of responses suggested themes more communication, more effective, and more responsive services, as shown in table 4-12 below.

Table 4.7 Coded responses to improvements to disability services

CODE	PARTICIPANT STATEMENTS
C	Giving student more idea about the resources
C	Have a disability staff member at each branch to better communicate.
C	Have accommodations be updated when a new semester starts
C	Just let students know the services are available.
C	Make information about the services available through brochures.
C	Make sure teachers are fully aware of each situation and require feedback on their part that they understand the circumstances.
C	More communication; most students involved in disability services will not reach out first
E	Better instructor implementation.
E	Currently, I believe they are doing a great job. I will be graduating this next Spring and could not have done it without their assistance.
E	I think the system is already very effective.
E	needs need to be met more effectively
E	The school did an excellent job to help me finish off the rest of the semester I do not know what more to say on that.
R	I think the disabilities office does a fantastic job of making themselves known and trying to help their students- I think the only improvement lies outside of their control, with professor willingness to help as well.
R	I would like to see more of the science classes be available for students with disabilities by utilizing increasing technology.
R	Just continue to be respectful and understanding of students with disabilities.
R	Just continue to be there for everyone.
R	just more responsive
R	More awareness about tolerance
R	Nothing that I can think of. Everyone on BC3 main campus is very kind and supportive. They seem to go out of there way to help asap.
R	the way you guys are doing it now is pretty good so I don't know how to make a change because it seems fine to me.

C – Communication E – Effective R – Responsive

4.1.3 Disaggregation by Campus

Cross-tabulations were constructed (table 4-13) to explore responses among students attending main campus in Butler and the off-campus locations at Armstrong, Brockway, Cranberry, Lawrence Crossing, and Linden Pointe, and four survey items of particular interest to the Office of Access and Disability Resources. A majority of responses to survey items were consistent between main campus and off-campus students, but several notable inconsistencies were included in the cross-tabulation.

Table 4.8 Main campus and off-campus comparison

Campus	Gender	Knew accommodations were available at BC3 when first enrolled	Service provider visits per semester	Instructors' inclusion of disability service statement on syllabus	Disability impacts continued enrollment at BC3
Off-Campus 33 responses	60.6% female 39.4% male	90.1% yes 9.1% no	6.1% 6+ visits 15.2% 3-5 visits 60.6% 1-2 visits 9.1% never 9.1% no response	27.3% yes 12.1% no 51.5% sometimes 9.1% no response	51.5% yes 36.4% no 12.1% no response
Main Campus 73 responses	67.1% female 32.9% male	79.5% yes 20.5% no	15.1% 6+ visits 21.9% 3-5 visits 41.1% 1-2 visits 13.7% never 8.2% no response	38.4% yes 24.7% no 26.0% sometimes 11.0% no response	69.9% yes 16.4% no 13.7% no response

First, over 90% of off-campus students reported knowing that accommodations were available when they first enrolled at BC3. Conversely, only 80% of students on main campus reported knowing that accommodations were available when they enrolled. Though the difference is not extreme, it may be of value to further explore steps to increase the awareness of the Office of Access and Disability Resources, its purpose, and who is eligible for accommodations. With

more than 20% of students at main campus reporting that they didn't know that services existed, it is concerning that many current students still may not know that they are eligible for accommodations and services.

Another notable variable between main campus and off-campus students relates to the number of times students visit their disability service provider each semester. Almost 14% of students registered with the Office of Access and Disability Resources never visit their disability service provider, where only 9% of students on off-campus never visit. Again, though the disparity between main campus and off-campus is not drastic, it is worth exploring why 10 out of 73 students are choosing not to visit their disability service provider each semester.

When asked if instructors include information on their syllabus about the availability of disability related accommodations, nearly 25% of students at main campus reported that instructors do not, while only 12% of students at off-campus locations reported the same. A total of 79% of students at off-campus reported either "yes" or "sometimes" when asked, while students at main campus reported a total of 63%. Interestingly, many instructors teach at both main-campus and off-campus.

When asked if students' disabilities impact their continued enrollment at BC3, 70% of main campus students and only 52% of off-campus students responded affirmatively. This may again indicate a higher severity of disability at main campus. Reasons listed for disability impact included both positive and negative factors with many students responding that their disability positively affects their enrollment.

4.1.4 Survey Summary

Overall, the number of survey respondents was quite high, especially in the midst of the Covid-19 pandemic and strictly remote contact with students. Disaggregation among demographic items and students' perceptions and ratings were explored, but few differences were discovered, other than differences between main campus and off-campus students.

The survey results begin to shape the perceptions of students relative to their disability related needs, institutional services, and students' continued enrollment at BC3. A breakdown of the application of survey responses to research questions is depicted in table 4-14.

Table 4.9 Students' responses to overriding research questions

Research Question	Survey Item	Student Responses
1. What are the students' perceptions of their disability-related needs and existing institutional services?	#8 - Students' ratings of interactions with the Office of Access and Disability Resources.	Mean X = 3.68/4.0. 94% good-excellent cumulative % across all variables
	#11 - Students' ratings of academic accommodations.	Strengths and some improvement areas.
	#12, #13 - Students' ratings of accessibility to campus facilities.	Very high ratings.
	#15 - Students' ratings of experiences with instructors.	Mean \bar{x} = 3.29/4.0.
	#16 - What more do instructors, staff, and advisors need to know about disability services?	Coded with themes of Patience, Compassion, Tolerance
	#17 - Should more information about disability services be made available/promoted to students?	Yes = 65%.
	#19 - What improvements could be made to disability services?	Awareness, training, tolerance, overall very positive.

2. How do students perceive their disability needs and institutional services might impact their enrollment or graduation trajectories?	<p>#18 - Do you feel that your disability needs impact your continued enrollment at BC3 in either a positive or challenging manner?</p> <p>#18a - How is your disability impacting your continued enrollment at BC3?</p> <p>- Student interviews will inquire deeper into RQ #2.</p>	<p>Yes = 74%.</p> <p>Many in a positive manner, some with specific challenges.</p>
-----------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------

4.2 Interview Responses

The second phase of the research study involved interviews of students who volunteered to participate at the completion of the survey. A total of 33 students of the 106 survey respondents volunteered for interviews. All students who volunteered to be interviewed were called by phone to participate. The order in which the 33 students were called was randomly chosen. Of the 33 students called, 13 interviews were completed. For the students not interviewed, voice messages were left for many while others did not have voice mail activated. A follow-up call was made to all students who did not initially respond. Students were asked three primary questions with follow-up questions pending students' responses. Follow-up questions were employed to prompt more insight and detail into students' perceptions and experiences with disability services.

The duration of the structured interviews ranged from 5 minutes to 27 minutes. Several conversations were very personable and candid, while others were more formal and intended to simply satisfy the basic tenets of the interview, despite attempts by the interviewer to prompt further insight and detail of students' experiences and perceptions of disability services. One interview resulted in discussions for planning of classes for the fall semester and another became detailed about difficult experiences with a particular instructor. Students were generally very

complimentary within the description of their experiences and perceptions, but provided examples of challenging experiences and areas for improvements.

4.2.1 Strengths of Disability Services

In the interviews, students were first asked to provide insight into the strengths of disability services at BC3. Responses were reviewed and coded into four clear themes; accommodations, approach with students, responsiveness, and coordination of services.

Accommodations

Overall, students referenced accommodations as a strength of the disability services provided at BC3. Students referenced the accommodations of extended time for testing, testing in private rooms, and note-taking, as strengths. Additional strengths included helping a student put their accommodations in place, the ease of getting accommodations, the appropriateness and helpfulness of accommodations in general. One student cited the appropriateness of their accommodations relative to meeting his/her needs. Other students referenced the importance of having extended time for testing and the ability to get a separate room for testing.

Approach with Students

When citing strengths, many students made reference to the approach and helpfulness they encountered with disability service providers, faculty, and staff. Terms used to describe students' experiences included helpful, friendly, patient, courteous, respectful, understanding, supportive and encouraging. Comments referencing helpful, supportive, and encouraging approaches with students included "you guys are really there for students' educational experiences" and "I'm never given attitude, never feel like I'm bothering anyone." Students also noted services as "above and

beyond,” being there for students, never given attitude, and always receiving a response with cheerfulness.

Responsiveness

Response time also received numerous comments from responding students. Good communications and quick response time was referenced often. Comments referencing quick response time included, “it’s always very easy to get hold of someone if I need help” and “I don’t ever feel anxious about someone getting back to me.” One student noted that they don’t ever feel anxious about someone getting back to them, while another student referenced the ease of getting in touch with someone to register for disability services.

Coordination of Services

The coordination of disability services was also referenced as a strength. Comments pertained to service providers and staff working together to employ services, and the willingness of disability service providers to advocate for students, making sure that instructors were aware of disabilities and approved accommodations. One student noted the strength of “how you work together as a team” while another noted the coordination between disability service providers and faculty, stating that disability service providers “make sure that teachers are aware of disabilities.”

4.2.2 Themes for Improvements to Services

The second interview question asked students what they believe can be improved upon by disability service providers, faculty, facilities, and the college as a whole, relative to their disability-related needs. Responses were again reviewed and coded into four themes; information about services, approach with students, organization of services, and accommodations. There were

significantly fewer responses to the question of improvement areas for disability services, as opposed to strengths. Also of note, three of the four themes related to improvement areas were the same or similar to the themes established within students' cited strengths of disability services.

Information About Services

Within comments related to the provision of information about disability services, students cited making information easier to access, including how services work, and the benefits to registering with the Office of Access and Disability Resources. One student suggested "putting everything in a platform in social media and podcasts, making everything easily accessible." Another student noted a need to "increase awareness of disability types and how those types of disabilities can be services," suggesting a need to include more detailed information within promotions of disability services at BC3.

Approach with Students

Suggested improvements relative to faculty members' approach with students accounted for many of the comments within this theme. Students expressed concern with the need for instructors to be nicer, more flexible, and more discreet in their interactions with students with disabilities. One student expressed concerns for the power differential between faculty and students while another suggested that instructors acted like it was more normal to work with students with disabilities. Another student noted that "some students are afraid to ask for accommodations because they're afraid to feel dumb." Professional development was suggested for better understanding how to work with students with various disabilities.

Organization of Services

The improvement of having a disability service provider regularly available at each off-campus location was of particular interest relative to organization of services. Currently, main campus is the only campus that has a full-time disability service provider. Each of the off-campus locations has a disability service provider on site 1-2 days per week, except Brockway, which has a provider available remotely or by special appointment. One student commented that it would've been nice to meet with an office representative in their first semester while another "wish(es) there was a disability office at all locations."

Accommodations

The most suggestions for improvements related to disability-related accommodations. Concerns for note-taking and extended testing time accounted for many of the recommendations relating to accommodations. Other suggestions included alternative formats for resources, assurance of proper implementation of resources, and professional development for accommodating different types of disabilities. One student expressed concern that lots of services and accommodations are "outdated relative to Brown vs. The Board of Education," and need to be changed. The student went on to reference the more hands-on approach that he experienced in high school where the process was much more formalized and more accommodations were granted to students. Other students again referenced the need for professional development for faculty and staff, specifically in "knowing how to accommodate different types of disabilities."

4.2.3 Research Question #2

To close the interviews, students were asked a two-part question encompassing research question #2. First, they were asked if they believed that their disability-related needs were being met at BC3. Four categories were formed based on the responses of students including yes, mostly yes, not really, and no. Responses shown in table 4-15 below indicate that students' needs are being met.

Table 4.10 Disability Needs Met at BC3

#	Response	Frequency Percent	Frequency
1	YES	69.2%	9
2	MOSTLY YES	30.8%	4
3	NOT REALLY	0.0%	0
4	NO	0.0%	0

In the second part of the question, students were asked how their disability-related needs and the services and resources at BC3 impacted their continued enrollment. Coding of responses was conducted to produce three themes (highly impactful, somewhat impactful, and no impact). The vast majority of comments applied to the “highly impactful” category, reinforcing students’ overall satisfaction with disability services, as well as indicating that their disability related needs are being met.

Highly Impactful

Most responses fell within the “highly impactful” category of disability-related needs impact on continued enrollment at BC3. Several students directly stated that they would not be

able to go to college without the disability services they have been provided at BC3. One student stated that “as long as I’m able to receive the same type of accommodations, I’ll be able to continue without issues.” Additional comments referenced step by step guidance, having support, helping to alleviate a high level of stress, and having the help needed to complete college as highly impactful strategies. Comments included “you guys are the only reason I’m still attempting college and even considering going to a 4-year college” and “I really have people behind me here to back me up; a giant factor in my continued enrollment.”

Somewhat Impactful

Only one response applied to the “somewhat impact” category pertaining to disability needs and continued enrollment. The student stated that accommodations were helping him/her progress and continue at BC3, but that the student was not fully dependent on disability services and resources.

No Impact

The only comment received within the “no impact” theme was from a student who stated that he/she hasn’t been using their accommodations because they have not been needed to this point. Therefore, disability services has not impacted his/her continued enrollment.

4.2.4 Summary

The student survey and interviews were designed and administered to answer the two research questions for this study. Survey responses provided demographic data to explore potential relationships between various sub-groups and students’ ratings and perceptions. Survey

responses also provided the data needed to formulate interview questions, which were then constructed to more deeply answer both research questions.

The students who completed surveys and participated in interviews were candid, insightful, and appreciative to be part of the study. All responses, positive and critical, were welcomed and documented as they were communicated by students. During interviews, it was stressed that critical feedback was very much welcomed and would not be used against students in any way, which prompted some additional responses. I believe that students were pleased to know that their feedback is of value to the Office of Access and Disability Resources and that work is in progress to examine ways to improve services and resources for students.

Chapter 5 further summarizes findings of the study and provides further findings and conclusions from the data. The conclusions will lay a foundation for potential improvement planning for disability services at Butler County Community College.

5.0 Interpretations and Implications

The services and resources afforded to students with disabilities are required, at minimum, to provide equal access to all educational services and activities associated with higher education institutions as utilized by non-disabled students (A.D.A. National Network, n.d.). Some students argue that even the minimal standard for providing disability services is not being met by colleges and universities (Grasgreen, 2014), though compliance has become more of a priority given increases in disability-related case law (Lieberman, 2019). Although providing basic access to educational services may satisfy legal requirements, this standard may not align with students' and parents' understandable expectations that colleges fully meet the individual needs of students with disabilities and provide a welcoming and inclusive school culture. The connections that students feel with disability services staff, faculty, and other students play a significant role in students feeling supported, included, and ultimately experiencing success in higher education (Scott, 2019).

This study was designed to examine both fulfillment of the minimum legal requirements for the provision of disability services at Butler County Community College and to examine the extent to which inclusivity and a supportive environment is perceived by disabled students at BC3. The survey and interviews were designed to answer the two overriding research questions which encompassed this premise. Surveys and interviews were conducted. Given nearly half (49%) of all students registered for disability services in the spring 2020 semester responding to the survey, and an additional 13 phone interviews, the total population of students registered for disability services at BC3 was well represented in the study. From these data, analysis indicated very positive findings, with some notable areas for improvement, as well as several areas where further discussion, analysis, and/or areas for inquiry may be beneficial.

Chapter 5 provides further examination of survey and interview data relative to the research questions, as well as practical applications and implications for professional practice at Butler County Community College.

5.1 Perceptions of Needs and Services

Research question #1 examined students' perceptions of their disability-related needs and existing institutional services. Demographic information was collected to consider potential differences in perceptions of services among sub-groups. Other survey questions asked students to rate various aspects of disability services and provide open-ended feedback about their perceptions of services and recommendations for improvements. Survey responses were the primary source used for examining the first research question.

Overall, the study found that students are very satisfied with their disability-related services, interactions, and experiences at Butler County Community College. Nearly 87% of students who are registered for services visit their disability service professional at least once each semester and 35% visit three or more times, suggesting that those registered for services are generally using them. Students rated their interactions with their disability service provider at a 93% or greater approval rating on each of 10 included competency areas of service. Students rate the utilization of their accommodations in classes and the accessibility of campus facilities (main campus and off-campus) at a similarly high level. Experiences and interactions with instructors were rated at an approval level of 89% or greater on six included competency areas. Most responses to open-ended items reflected positive comments and appreciation for services and interactions at BC3. When asked what improvements could be made to services, interactions, and

experiences, over half (56%) of the responses indicated that services should continue as they currently exist. These results appear to differ from similar studies, where students expressed more dissenting comments towards the availability of disability services, their interactions with disability service providers, and their negative interactions with faculty. Some of the literature even goes so far as to demonstrate colleges' and universities' efforts to block the availability of disability-related accommodations and cite aversions to having students with disabilities in college classrooms (Davis, 2015).

Various suggestions for improvements were noted through open-ended survey responses. The lowest ratings of various services and students' experiences are also noted as possible improvement areas. First, when rating disability-related accommodations, several students cited note-taking accommodations as an area of concern. Students noted that some instructors were not able or declined to provide notes from lectures, while others cited concerns with the availability of tools and resources used by the Office of Access and Disability Resources for students needing note-taking as an accommodation. Students also noted instructors' inclusion of a statement about disability services or disability-related accommodations on their syllabus as a potential improvement area. Students indicated that slightly more than one-third (39%) of instructors include such a statement as part of their syllabus.

Several concerns were noted regarding instructors' implementation of accommodations and familiarity of the process of implementing disability services. Two comments noted a lack of understanding of how to provide test accommodations and note-taking accommodations and cited instances where instructors were surprised by receiving requests for accommodations. Difficulties of students with their instructors was widely noted within the review of literature, noting that many faculty are not trained educators and fail to see the need for accommodating disability-related

needs, but further, have never received any formal training in working with students with disabilities (Grasgreen, 2014; Rao & Gartin, 2003). Over 65% of students also feel that more information about disability services should be made available to students, particularly, what services are available and how to maximize students' use of services. It was suggested that more clarity be communicated about who is eligible for services, with some students not understanding that they are technically eligible for disability services. Finally, several students noted the need for additional tolerance, understanding and flexibility for students with disabilities from faculty and staff. Comments referenced concerns regarding discretion, acceptance, and disability stigma. This notion was also widely referenced within the literature, particularly regarding the climate of campuses towards students with disabilities, students' perceptions of the level of acceptance they felt, and how this adversely impacts students' continued enrollment (Harbour & Greenberg, 2017).

At main campus, 70% of students reported that their disability impacts their continued enrollment in some manner, as opposed to just over 50% at off-campus locations. The reasons for this impact vary, relating to either disability-related challenges or to motivational perseverance. Most reasons listed related to disability status as a positive motivator on enrollment, but this disparity is worth further examination.

It is important to reinforce that though numerous areas for improvement and further consideration are noted within this section, responses and comments were largely favorable. It is also important to note that potential improvement areas from survey responses within this dissertation are fairly consistent with improvement areas referenced in the literature, such as studies by Scott (2019), Newman and Madaus (2015), and the Association on Higher Education and Disability (n.d.).

5.1.1 Practical Applications

The analysis of survey responses provide notable findings and potential action items. Data and initial findings will be shared and discussed with colleagues within the Office of Access and Disability Resources to challenge existing service levels and discuss improvement areas. Synthesis of data, analysis, and findings to practical applications is essential for strengthening and improving services.

Survey responses indicated a need to include a disability-related statement on course syllabi. Comments also suggested that some faculty may not be fully aware of the processes involved with disability services or the proper contacts for questions and concerns. Additional comments suggested the need for a more supportive approach from some faculty and staff towards students with disabilities. A very simple action step could be to send an email reminder to all faculty prior to the start of each semester containing a sample statement to be used within syllabi by instructors relative to the availability services and accommodations. The inclusion of a statement about disability services could help to provide a supportive introduction to classes and show students with apprehension that the instructor recognizes the need for accommodations by some students. This email could also remind faculty that they will be working with students with disabilities, that these students comprise an essential portion of students at BC3, and to suggest a supportive approach to working with students with various disabilities. The email should be written in a professional, but personable and supportive manner, in which support is offered to instructors who may need assistance working with students with disabilities, or even have a disability of their own. This email would also regularly remind staff of the resources available for the Office of Access and Disability Services and who to contact. As syllabi must be submitted and approved to each dean's office, it would also be of benefit to gain the support of the deans to

help encourage or even require the inclusion of a disability statement in every syllabus. This is a very simple way to help improve upon a number of concerns noted within students' responses.

From the survey, students highlighted many strengths and expressed significant appreciation relative to experiences and interactions with their disability-related needs. Positive feedback included academic achievement, relationships with faculty and staff, services and resources, accommodations, and the support received as a student with a disability. This feedback provides first-hand accounts of the benefits to registering for and more diligently utilizing disability services. As 65% of students indicated that more information should be made available to students about disability-services, testimony from students currently utilizing services could be powerful. The strengths noted within survey responses provide an opportunity to publicize disability services and address a need to provide additional information to students, particularly at main campus, where only 80% of students knew that disability accommodations were available upon enrollment to BC3, as opposed to 90% at off-campus locations.

These are only two examples of many more practical implications expected from the sharing of data and analysis relative to this study.

5.2 Disability Needs and Continued Enrollment

Research question #2 examined how students' perceptions of their disability needs and institutional services impact their continued enrollment. Survey responses provide some insight, however, the objective of interviews was to evoke insight and detail into students' perceptions of their needs, services and continued enrollment. Students shared what they perceive to be strengths of disability services and aspects of BC3 that involve experiences with students with disabilities,

improvement areas, whether or not their needs were being met at BC3, and how their needs specifically impact their enrollment.

Students participating in interviews cited the responsiveness and approach with students by disability service providers and some faculty and staff as the biggest two strengths of their disability-related experiences. Students feeling respected, understood, and important is significant to students, reinforcing the service qualities of developing rapport, actively listening, being supportive and understanding, returning contacts quickly, and avoiding judgement with students' conditions and needs. This notion was widely reflected within the literature, relating back to healthy campus climates in which student feel respected and comfortable, ultimately leading to increased achievements in developmental and educational outcomes for students with disabilities (Harbour & Greenberg, 2017). Additional strengths noted included implementation of accommodations and coordination of services.

When asked if students' disability needs were being met, all students responded either "yes" or "mostly yes," even several who were particularly passionate about improvement areas. Students overwhelmingly indicated that services, resources, and their disability-related experiences have been highly impactful on their continued enrollment at BC3.

The two biggest improvement areas noted by students in interviews were the implementation and facilitation of accommodations (which was also noted as a strength by some) and faculty approach with students. Zhang (2010) found the even though faculty are generally willing to provide accommodations to students with disabilities, accommodations are not fully implemented by instructors on college campuses. Some students explained that accommodations weren't granted by some instructors as readily as others, or permitted at all. One student advised to "make sure each student gets all of their accommodations and accommodate easier" while

another suggested to “make the teachers allow extended time.” Note-taking and test accommodations were cited most widely in reference to improvements to accommodations.

Regarding improvements to approaches with students, comments referenced the need for more flexibility, a friendlier approach, avoiding a stark power differential, and making it feel normal to have disabled students in college classrooms. A suggestion for improvements to both accommodations and approaching students with disabilities was the facilitation of additional professional development opportunities for faculty working with students with disabilities. One student suggested “training for teachers so that they know how to accommodate different types of disabilities.” Another student noted the need to “increase the awareness of disability types and how those types of disabilities can be serviced.”

Similar to noted improvement areas within survey responses, suggested improvement areas were significantly fewer than noted strengths. To further inform improvement areas, additional data and insight can be collected regularly from students continuing to utilize disability services at BC3.

5.2.1 Implications for Professional Practice

From the notable findings within interview responses relative to research question #2, many implications for professional practice can be inferred. Explained below are three examples of possible action steps derived from interview data identifying strengths and improvement areas of disability services.

Given repeated suggestions for improvements related to experiences with faculty, it may be beneficial to further examine responses of student surveys and interviews in comparison with responses of a survey of faculty and staff. A survey would promote the importance of working

with students with disabilities and provide data of the perceptions and needs of faculty relative to their experiences with students with disabilities. The survey would also open communications to questions and communications, and lend to opportunities for professional development for all faculty and staff.

With the sudden shift to remote learning due to the COVID-19 pandemic, disability service providers may also consider remote-style facilitation of professional development opportunities for faculty and staff relative to supportively working with students with disabilities. Remote professional development would provide a higher level of convenience and flexibility, and allow faculty and staff from main campus and all off-campus to participate. A certificate for becoming a “disability-supportive” staff member, similar to other professional development credentials, could be a consideration (and incentive) for participation in sessions of identified improvement areas.

A review of the processes for utilizing test accommodations and note-taking services at main campus and off campuses could also serve to address several noted concerns. At main campus, test accommodations are scheduled and administered in a fairly clear manner, but at off-campus, inconsistencies for scheduling and granting accommodations may not be as supportive. Ensuring consistency of test accommodation request procedures, as well as assessment of distraction-free testing rooms and extended testing time procedures will further inform specific needs. Note-taking at six different campuses could also be a concern. Establishment of a list of approved note-taking methods and tools, which students could be given the option of choosing (depending on appropriateness to unique classroom settings), would provide students with ownership of their accommodation as well as the option to change methods if necessary.

Investigating these accommodations could also lead to discussions about the processes of other accommodations and about disability services in general.

Implications for virtual accommodations are also an area for further exploration. As many colleges had their first experiences with all-remote instruction during the second half of the spring 2020 semester due to the COVID-19 pandemic, disability service providers were forced to think creatively about the continuation of accommodations. Some disability-related needs became extremely difficult to accommodate, such as note-taking for synchronous instruction, facilitation of test accommodations, sign language interpreting, and reading accommodations for quickly-adapted course materials. Email, phone calls, texting, and virtual meetings became the norm for communications, but without a specific meeting place for students and disability service providers, some communications were less frequent. Considerations for additional tools and resources for remote disability services would benefit students if the need arises again in the future, as well as for students who typically take online classes in a normal semester.

Though the study included only students registered for disability services at BC3, implications may be of interest and value to other two-year post-secondary institutions as well as some four-year colleges and universities.

5.3 Summary

Overall, results of the survey and interviews reflect very positive perceptions and benefits of the services and resources provided by the Office of Access and Disability Resources, as well as disability-related experiences of students at BC3 in general. The study also provides insight into various improvement areas, producing initial ideas for action steps and improvement planning.

The data and analysis of the study provide a clear basis for discussions, further examination, and improvement planning.

Further research and examination of various aspects of disability services may strengthen or further inform implications of this study. The two examples noted within practical implications and professional practice suggest a need to survey faculty and staff, and to review processes involving test accommodations and note-taking services. Each suggestion would further inform identified improvement areas and generate wide-scale discussions about needs associated with disability services. Another significant consideration for further examination is the opportunity to promote disability services to students not registered with the Office of Access and Disability Resources. It is unknown how many students are disability eligible at BC3, who are not currently utilizing services and accommodations which could provide significant academic assistance. Use of the testimonial and findings from this study could help to demonstrate the benefits of services, promote a more inclusive campus culture, and encourage more students with disabilities to register with the Office of Access and Disability Resources.

Any opportunity to generate discussions about disability services can be of significant benefit to addressing areas for improvements. Discussions can heighten awareness to the need to work supportively with students with disabilities, inform of the primary resources and contacts for those not in regular contact, and open discussions about other need areas. Emails, surveys, and professional development sessions can prompt important discussions with faculty and staff.

Examples of practical applications and implications for professional practice are only a starting point for larger scale improvement planning involving students, staff, and services providers.

6.0 Summary and Next Steps

The review of literature, data, and analysis within this study provide a useful lens to consider the quality of and implications for disability services at Butler County Community College, and more broadly, higher education in general. The data collected for this study did not offer any significant surprises when considering the review of literature and my personal professional experiences with disability services. Reported findings are generally consistent with the suggestions from research literature and current practices. Specific strengths were identified and some potential improvement areas were noted.

Of the noted improvement areas cited within chapters 4 and 5, no urgent needs for improvements were found. Overall, the study produced very favorable results, as per the perceptions of students relative to disability services and their disability-related experiences at BC3. The research literature highlights concerns for lack of services, overcoming stigma for disabilities, the difficulties with the transition from high school to college relative to accessing services, and the ever-present threat of litigation (Grossman & Smith, 2015). These issues were not reflected in the BC3 data collected. This may indicate that services provided at BC3 are more responsive to the students' needs. There may have been a positive bias to the disability service provider facilitating the study, or it may be that the needs and experiences of BC3 students are not as severe as those of other research participants.

This study will be shared with disability service providers and stakeholders at BC3 to provide insight into services and inform improvement planning efforts. The study will also be shared with interested disability service providers in other colleges and universities and made available to any other person interested. The study may lend itself to assisting with questions about disability

services and further exploring areas of interest and concerns. It is the intention that the study will lead to improvement planning at BC3, but may serve in a similar capacity at other institutions of higher education

General implications from this study indicate that disability services in higher education have progressed significantly, particularly in recent years, but are still a work in progress. It is now more than ever, widely understood and accepted by faculty and staff that students with disabilities can and should attend and experience success in colleges and universities.

6.1 Improvement Planning

Findings and implications from the study will be shared with stakeholders associated with the Office of Access and Disability Resources so that improvement planning can become a team effort within the department. It may be of benefit to share findings with faculty and students in various ways, and to include their input within discussions of priorities and actions steps for improvement planning.

Several key components should be included in effective improvement planning. As the inquiry within this study has produced data, analysis, and initial implications for practice, improvement planning should start with involving key stakeholders to review findings. Discussion of findings with the improvement planning committee can help the committee collectively determine needs, priorities, and action steps within the limitations of available resources. Action steps should follow the premise of “SMART” goals, in that they are specific, measurable, achievable, relevant and time-bound (Eby, 2019). The findings can help assure fidelity and focus throughout improvement planning, in order to minimize the inclinations of personal agenda items,

and maximize the outcomes relative to improving and enhancing disability services for all students. Additional data collection, perhaps from other stakeholders such as faculty and administrators may prove helpful. An assessment plan can also be created to evaluate the effectiveness of action steps and determine if objectives are being met, and to provide formative information for mid-term adjustments. Subsequent planning following evaluation of initial action steps may be necessary and appropriate, as a commitment to continuous improvement planning.

6.2 Reflections and Professional Learning

Through completion of this dissertation, a number of learning experiences have left a lasting impression. In reflection of the processes and experiences that went into this work, I can honestly say that I have learned a tremendous amount about disability services in higher education and doctoral level research, and I have grown both personally and professionally.

Though I am pleased with the research and overall outcomes of the study, there are several aspects of the study that I would consider approaching differently. First, my approach to the literature review was that of someone who lacked a clear plan and purpose. I didn't fully understand how to organize key findings of the literature and my initial timeline for completion of the literature review was haphazard at best. Another improvement area would be the wording and formatting of several survey questions. In particular, I realized after reviewing survey responses that the interpretation by students of certain questions and how the responses were reported through Qualtrics, were different than what I had intended. I would also construct interview questions and specifically anticipated follow up questions in a manner that elicited more detail and

insight within responses, particularly drawing students away from any feelings of having a need to respond only positively if they in fact had other suggestions for improvement areas.

In reflection of this dissertation, it cannot go without mentioning that on March 11, 2020, I presented the defense of my overview and was soon to begin the initial phase of the research study. While waiting for the evaluation from my panel for the overview defense, I began to receive text messages that BC3 was immediately closing due to the COVID-19 outbreak, until further notice. Aside from the litany of thoughts and concerns for the health and well-being of family, friends, students, colleagues, and how the outbreak would impact life on a broader scale, I quickly turned to concerns about how I was going to adjust the approach of my research study and ultimately complete my degree. Though the process for conducting the surveys did not change significantly, initial plans of conducting a focus group were adjusted to individual phone interviews and all subsequent contacts for the study, including those with my advisor, became remote. Though initially a major concern, response rates for both surveys and interviews were extremely high. Other minor adjustments were needed at times, but overall, the remainder of the study proceeded smoothly, despite completion of the dissertation amidst a global pandemic.

The learning that has occurred through this dissertation and study has been invaluable. Aside from gaining a deeper understanding of the origin, legislation, case law, and need surrounding disability services, I have also gained an understanding of formal research study, the purpose and process of IRB approval, and how to much more professionally work with and analyze data. I also have a greater respect for and understanding of the challenges and needs of students with disabilities in higher education. Students are largely on their own throughout the process of registering for services and requesting their accommodations. It is understandable that many students who are eligible for services never access them, as the process is an additional

responsibility to the already challenging processes of admissions, financial aid, registration, and the challenges of college-level study.

Over the course of this study, I have also learned to be more conscious of my approach to professional practices and even everyday interactions. As this study was focused on students' perceptions, it was not my place to disagree with or dismiss students' responses or the findings of the study, regardless of my own perspectives. Their perceptions are their realities. It can be very difficult at times to avoid negating the perspectives and opinions of others, especially by those with extensive education and life experiences. It was paramount to this study to let the research take its own shape, rather than assuming conclusions based on the literature review and my own prior experiences. I will also work to lead others to consider alternatives to their previously learned notions, rather than assuming the role of authority on various topics. Working to understand and accept the perceptions of others is important in working with individuals with disabilities, and especially important in today's society relative to diversity and equality.

Within the last month, my position at Butler County Community College has changed from Student Success Coach to Interim Director of the Cranberry off-campus. Some of my work remains similar to my previous position in working with students in disabilities, tutoring, retention, and success coaching. Other responsibilities will include advising, recruitment, financial aid, scheduling, budget oversight, and supervision of the staff and facility at the Cranberry campus. The new role will allow me to work with students with disabilities in both a disability service provider and adviser capacity on a full-time basis. I will also be able to work with a specific group of faculty and staff, with whom I can readily and continuously assist in better serving the needs of students with disabilities. The faculty and staff at Cranberry are already aware of my work with students with disabilities and have used me as a resource prior to my change in positions. As the

director, given my prior professional experiences and learning from this research study, I will continue to build upon my work in building an inclusive, supporting, and encouraging culture for students with disabilities and all students. Using this dissertation, I will more closely analyze data and include stakeholders to create improvement planning specific to disability services at the Cranberry campus. Initial actions steps will be to review note-taking and testing accommodations, and to communicate to faculty my availability as a resource for working with students with disabilities. Subsequent plans for a focus group will include students, staff and faculty, to identify further questions, concerns and needs related to disability services at the Cranberry campus.

6.3 Conclusion

Students with disabilities comprise a significant portion of students attending colleges and universities today. As diagnoses of medical conditions continue to broaden and case law pertaining to students with disabilities strengthens mandates and legislation, colleges and universities must continue to commit and even expand disability-related services and resources. Developing inclusive campus cultures is more the expectation of today's standards for addressing the needs of students with disabilities, rather than simply making educational services and resources "accessible," as required by legislation.

Though more attention has been directed to disability services than ever before, there is also much room to improve upon equitable access to educational services and resources. Students with disabilities now are needed on college campuses, as opposed to previously being tolerated, both for the enrollment needs of many colleges and universities, as well as for the learning, understanding and acceptance of non-disabled peers, faculty and staff. As issues of diversity,

discrimination, and equality are currently at the forefront of national movements and reform, it is imperative to recognize that students with disabilities “bring diverse and valuable perspectives to their schools and can themselves be powerful forces in reducing the stigma of having a disability in college” (Jones & Mitchell, 2019, p. 3). Students with disabilities can be a valuable resource in college classrooms, and can without question, achieve as successfully as any non-disabled peers.

Appendix A Student Survey Question

Student Survey Questions

1. What is your primary campus of attendance?

Main Campus - Butler
Cranberry

Armstrong
Lawrence Crossing

Brockway
Linden Pointe

2. What is your gender?

Female Male
Prefer not to say

Non-binary/third gender
Prefer to self-describe _____

3. When did you first enroll at BC3?

Semester _____ Year _____

4. How many credits have you completed at BC3?

0-15 credits 16-30 credits 31-45 credits 46+ credits

5. Did you know that accommodations for students with disabilities were available in college when you first enrolled at BC3?

Yes _____ No _____

If No: How did you learn that accommodations for students with disabilities were available in college?

Advisor
Another student
BC3 Instructor

Open House
Orientation
Parents

Welcome Day
Other: _____

If No: When did you learn that accommodations for students with disabilities were available in college?

Semester _____ Year _____

6. When did you first register with the Office of Access and Disability Resources?

Semester _____ Year _____

7. How often do you typically visit your disability services provider (Jenn Loue, Ryan Kociela, or Sherri Osborne) each semester?

Never Once or twice 3-5 times 6 or more.

8. Please rate the quality of interactions, services, and resources provided by your disability services office: 1 = poor 2 = fair 3 = good 4 = excellent

1. Student friendly process for establishing services

2. Kind and respectful interactions with students

3. Communicates important information
4. Responds to students' needs in a timely manner
5. Knowledgeable/skillful in working with students with disabilities
6. Determines appropriate accommodations
7. Flexible to the needs of students
8. Helpful with ongoing communications and consultation
9. Available when needed

Additional services: _____

9. Nature of your disability (check all that apply):

- | | |
|--------------------------|------------------------|
| ADHD | Learning Disability |
| Autism Spectrum Disorder | Mental Health Disorder |
| Health/Chronic Condition | Mobility |
| Hearing/Speech/Vision | Other: _____ |

10. Which accommodations have you used at BC3? (check all that apply)

1. Alternate format services (for example, audio-books, Braille)
2. Attendance flexibilities
3. Calculator availability
4. Note-taking accommodations (for example, instructor notes, student notes, recording)
5. Sign Language interpreting
6. Test accommodations
7. Other accommodations: _____

11. Please rate your use of the academic accommodations listed below:

1 = poor 2 = fair 3 = good 4 = excellent n/a = I don't have this accommodation

1. Alternate format services (for example, audio-books, Braille)
2. Attendance flexibilities
3. Calculator availability
4. Note-taking accommodations (for example, instructor notes, student notes, recording)
5. Sign Language interpreting
6. Test accommodations
7. Other accommodations: _____

12. Please rate the quality of accessibility for you on main campus facilities in Butler:

1 = poor 2 = fair 3 = good 4 = excellent n/a = haven't used

1. Bookstore
2. Classrooms
3. Computer labs
4. Field House
5. Founders Hall
6. Heaton Learning Commons/Library
7. Office areas
8. Parking and transportation
9. Pioneer Cafe/Student Union
10. Restroom facilities

11. Tutoring, advising, and student services
12. Other: _____

13. Please rate the quality of accessibility for you on off-campus facilities in Armstrong, Brockway, Cranberry, Lawrence Crossing, and/or Linden Pointe.

1 = poor 2 = fair 3 = good 4 = excellent n/a = haven't used

1. Classrooms
2. Computer labs
3. Office areas
4. Parking and transportation
5. Restroom facilities
6. Tutoring, advising, and student services
7. Other: _____

14. Do your instructors include a statement about disability and/or accommodations in the course syllabus?

Yes _____ No _____ Sometimes _____

15. Indicate below your level of agreement with each statement regarding your experiences with instructors relative to your disability accommodations.

1 = strongly disagree 2 = disagree 3 = agree 4 = strongly agree

1. My instructors are respectful and supportive of me as a student with a disability
2. My instructors are familiar with the processes for using my accommodations
3. My instructors are familiar with the disability services staff and their role in coordinating my accommodations
4. My instructors accept my need for accommodations
5. My instructors implement my accommodations
6. Additional comments: _____

16. From your perspective, what more do instructors, staff, and advisors need to know about disability services at BC3?

17. Should more information about disability services be made available/promoted to students?

Yes _____ No _____

If Yes: What information should be made available/promoted to students?

If Yes: How best should information be made available/promoted to students?

18. Do you feel that your disability needs impact your continued enrollment at BC3 in either a positive or challenging manner?

Yes _____ No _____

If Yes: How is your disability impacting your continued enrollment at BC3? (Check all that apply.)

1. I can't keep up with the pace of college coursework because of my disability
2. I'm not getting all of the disability related supports that I need
3. My disability motivates me to achieve my goals and continue enrollment at BC3
4. I have to miss too many classes because of my disability
5. I can't maintain the focus needed to complete all of my work because of my disability
6. My instructors aren't supporting my disability needs as much as I need
7. The disability accommodations I receive make it possible for me to continue to be enrolled
8. Accessing disability related accommodations is too difficult to keep up with
9. Facilities are not as accessible as I need them to be
10. My disability causes issues with organization and time management which keep me from performing at my best
11. Other: _____

19. What improvements could be made to make disability services at BC3 more effective?

20. We hope that students completing this survey might also be willing to participate in an individual question and answer session using a remote platform, in order to further explore students' thoughts and perceptions about disability services. Would you be willing to participate in an individual question and answer session?

Yes _____ No _____

If Yes, students are re-directed to a separate survey asking for their name and email address. Instructions reassure that their names and email addresses cannot be linked to their survey responses. Instructions also remind students that they are eligible for gift card drawings and will be notified shortly about available dates and times for the individual interviews. Students are also thanked again for completing the survey.

If No, students are re-directed to a separate survey asking for their name and email address, in order to be eligible for the gift card drawings. Instructions reassure that their names and email addresses cannot be linked to their survey responses. Students are also thanked again for completing the survey.

End of survey.

Appendix B Initial Direction for the Survey

Thank you for your participation in this survey. Your participation is extremely important in assisting the Office of Access and Disability Resources find ways to improve disability services for students at BC3. Please complete survey questions honestly and thoroughly. The survey should take about 15 minutes to complete.

At the conclusion of the survey, you will be asked if you would be willing to participate in an individual phone interview to talk about the results of the survey and further explore your needs and perceptions of disability services at BC3. Either a YES or NO response will direct you to a different page, where you will be asked for your name and email address. Your name and email address will make you eligible for the **drawing of several \$25 gift cards**, but cannot be linked to your survey responses. Those willing to participate in individual phone interviews will be notified shortly about dates and times for these remote meetings. We look forward to your participation.

Again, thank you very much for taking part in this important study!

Ryan Kociela

Student Success Coach
Butler County Community College
Doctoral Candidate, University of Pittsburgh

Follow this link to the Survey:

[\\${l://SurveyLink?d=Take the Survey}](#)

Or copy and paste the URL below into your internet browser:

[\\${l://SurveyURL}](#)

Appendix C Student Interview Script and Questions

Email Abbreviation:

Date/Time:

First, I want to thank you for your voluntary participation in this interview. The interview will take approximately 20-30 minutes, pending your responses and any follow up questions that I may have. I want to remind you that you may stop this interview at any time, and that your responses are entirely confidential and will not be used against you in any way, so please be open and honest with your responses.

I also want to ask if you are OK if I record this interview for purposes of accuracy review? Thank you.

1. On the survey responses, we received very positive feedback about disability services at BC3, but are looking for some additional insight into our strengths... What do you feel that BC3 doing really well in terms of Disability Services?
-
2. We also received feedback about improvements that BC3 can make relative to providing disability services, but would like some additional insight into possible improvements. What can we do better as disability service providers, faculty, with our facilities, and within the college as a whole... what improvements can we make?
-
3. A. Are we meeting your disability-related needs at BC3? B. How do your disability-related needs and our services and resources impact your continued enrollment at BC3?
-

Follow up questions/responses...

-

Again, thank you very much for your participation in this interview. Your feedback will be used anonymously to assist with improvement planning relative to the provision of disability services at BC3.

References

- A.D.A. National Network. (n.d.). What are a Public or Private College University's Responsibilities to Students with Disabilities? Retrieved from <https://adata.org/faq/what-are-public-or-private-college-university-responsibilities-students-disabilities>
- American Civil Liberties Union. (n.d.). Know Your Rights: Student Rights. Retrieved from <https://www.aclu.org/know-your-rights/students-rights/#the-rights-of-students-with-disabilities>
- Ask Vetsfirst. (n.d.). How Disability is Defined in Various Contexts. Retrieved on July 1, 2019 from <https://helpdesk.vetsfirst.org/index.php?pg=kb.page&id=2113>
- Association on Higher Education and Disability. (n.d.). Program and Professional Standards and Ethics. Retrieved from <https://www.ahead.org/professional-resources/program-standards-ethics>
- Atkinson, R. (2015). Viewpoint: Is it time to stop using the word “disability?” Retrieved on July 8, 2019 from <https://www.bbc.com/news/blogs-ouch-34385738>
- Banks, J. (2015). Barriers and Supports to Postsecondary Transition: Case Studies of African American Students with Disabilities. *Remedial and Special Education*, 35(1), 28-39.
- Barnard-Brack, L., Lan, W. & Lechtenberger, D. (2010). Accommodation Strategies of College Students with Disabilities. *The Qualitative Report*, 15(2), 411-429.
- Center on Technology and Disability. (n.d.). Differences Between High School and College for Students with Disabilities. Retrieved on January 8, 2019 from <https://www.ctdinstitute.org/system/files/HandOut-Differences%20Between%20High%20School%20and%20College%20for%20Students%20with%20Disabilities4-20-16.pdf>
- Crossman, A. (2019). Understanding Purposive Sampling: An Overview of the Method and Its Applications. Retrieved from <https://www.thoughtco.com/purposive-sampling-3026727>
- Davis, L. (2015). Where's the Outrage When Colleges Discriminate Against Students with Disabilities? *The Chronicle of Higher Education*. Retrieved from <https://www.chronicle.com/article/Where-s-the-Outrage-When/231799>
- Disability Rights Education & Defense Fund. (n.d.). A Comparison of ADA, IDEA, and Section 504. Retrieved from <https://dredf.org/legal-advocacy/laws/a-comparison-of-ada-idea-and-section-504/>

- Disabilities, Opportunities, Internetworking, and Technology. (2019). What is the United States Department of Education Office for Civil Rights (OCR) and what do they do? Retrieved from <https://www.washington.edu/doit/what-united-states-department-education-office-civil-rights-ocr-and-what-do-they-do>
- Duke University. (n.d.). Duke Disability Alliance. Retrieved on June 18, 2019 from <https://sites.duke.edu/disabilityatduke/dda/>
- Ebersold, S., & Evans, P. (2003). Disability in Higher Education. Retrieved from <https://www-oecd-ilibrary-org.pitt.idm.oclc.org/docserver/9789264105072-en.pdf?expires=1570978789&id=id&accname=ocid177629&checksum=4E75CC3BA707060F26539BD13E05342C>
- Eby, K. (2019). The Essential Guide to Writing SMART Goals. Retrieved from <https://www.smartsheet.com/blog/essential-guide-writing-smart-goals>
- Good Reads. (n.d.). Retrieved from <https://www.goodreads.com/quotes/4957-the-difference-between-the-almost-right-word-and-the-right>
- Grasgreen, A. (2014). Students with disabilities frustrated with ignorance and lack of services. *Inside Higher Ed*. Retrieved from <https://www.insidehighered.com/news/2014/04/02/students-disabilities-frustrated-ignorance-and-lack-services>
- Greenberg, D. (2017). Technical Report: Overview of Disability Law for Higher Education. *National Center for College Students with Disabilities*. Retrieved from https://www.nccsdclearinghouse.org/uploads/7/6/7/7/7677280/nccsd_technical_report_-_disability_law_for_higher_education_oct_2017.pdf
- Grossman, P., & Smith, E. (2015). Five Things Student Affairs Professionals Should Know About Disability Law. *NASPA Research and Policy Institute Issue Brief*. Retrieved from https://www.naspa.org/images/uploads/main/5Things_ADA_Download.pdf
- Hamblet, E. (2014). Nine Strategies to Improve College Transition Planning for Students with Disabilities. *Teaching Exceptional Children, Jan/Feb*, 53-59.
- Harbour, W.S., & Greenberg, D. (2017). Campus Climate and Students with Disabilities. *NCCSD Research Brief, 1*(2). Retrieved on 6/12/19 from http://www.nccsdonline.org/uploads/7/6/7/7/7677280/nccsd_campus_climate_brief_-_final_pdf_with_tags2.pdf
- Hong, B. (2015). Qualitative Analysis of the Barriers College Students With Disabilities Experience in Higher Education. *Journal of College Student Development, 56*(3), 209-226.
- Janiga, S.J., & Costenbader, V. (2002). The Transition From High School Postsecondary Education for Students with Learning Disabilities: A Survey of College Service Coordinators. *Journal of Learning Disabilities, 35*(5), 463-470.

- Jones, L., & Mitchell, T. (2019). Ending the Stigma for College Students with Learning Disabilities. *The Hechinger Report*. Retrieved from <https://hechingerreport.org/opinion-higher-ed-and-learning-disabilities/>
- Lieberman, M. (2019). Guide to accessibility practices aims to help institutions develop formal policies. *Inside Higher Ed*. Retrieved from <https://www.insidehighered.com/print/digital-learning/article/2019/02/20/guide-accessibility-practices-aims-help-institutions-develop>
- Lieberman, M. (2018). Technology Can Address Digital Accessibility--to an Extent. *Inside Higher Education*. Retrieved on July 22, 2019 from <https://www.insidehighered.com/digital-learning/article/2018/05/02/technology-can-help-address-accessibility-challenges-many-say>
- Lombardi, A., McGuire, J., & Tarconish, E. (2018). Promoting Inclusive Teaching Among College Faculty: A Framework for Disability Service Providers. *Journal of Postsecondary Education and Disability*, 31(4), 397-413.
- Madaus, J.W. (2011). The History of Disability Services in Higher Education. *New Directions for Higher Education*, 154, 5-15. doi:10.1002/he
- Madaus, J.W., Kowitt, J., & Lalor, A. (2012). The Higher Education Opportunity Act: Impact on Students with Disabilities. *Rehabilitation Education*, 26(2), 33-42.
- Mader, J., & Butrymowicz, S. (2017). The Vast Majority of Students with Disabilities Don't Get a College Degree. *The Hechinger Report*. Retrieved from <https://hechingerreport.org/vast-majority-students-disabilities-dont-get-college-degree/>
- McGuire, J. (2014). Universally Accessible Instruction: Oxymoron or Opportunity? *Journal of Postsecondary Education and Disability*, 27(4), 387-398.
- McKenzie, L. (2018). Fifty Colleges Sued in Barrage of ADA Lawsuits Over Web Accessibility. *Inside Higher Ed*. Retrieved from <https://www.insidehighered.com/news/2018/12/10/fifty-colleges-sued-barrage-ada-lawsuits-over-web-accessibility>
- Menter, I., Elliot, D., Hulme, M., Lewin, J., & Lowden, K. (2011). A Guide to Practitioner Research in Education. Los Angeles: Sage.
- Merriam-Webster. (n.d.). Definition of "disability." Retrieved on July 1, 2019 from <https://www.merriam-webster.com/dictionary/disability>
- Munyi, C. (2012). Past and Present Perceptions Towards Disability: A Historical Perspective. *Disability Studies Quarterly*, 32(2). Retrieved from <http://dsq-sds.org/article/view/3197/3068>
- National Joint Commission on Learning Disabilities. (1994). Secondary to Postsecondary Education Transition Planning for Students with Learning Disabilities. Retrieved on August 19, 2019 from <http://www.ldonline.org/article/7756/>

- Newman L., & Madaus, J. (2015). An Analysis of Factors Related to Receipt of Accommodations and Services by Postsecondary Students with Disabilities. *Remedial and Special Education*, 36(4), 208-219.
- Rao, S., & Gartin, B.C. (2003). Attitudes of Faculty Toward Accommodations to Students with Disabilities. *The Journal for Vocational Special Needs Education*. 25(2), 47-54.
- Rose, B. (n.d.). Nine Cases That Have Shaped Disability Services in Higher Education. Retrieved on April 2, 2019 from <http://www.hunter.cuny.edu/access/resources/court-case-studies>
- Rothstein, L. (2018). A Primer on Disability Discrimination in Higher Education. *Laws* 2018, 7(3), 25. Retrieved from <https://doi.org/10.3390/laws7030025>
- Scott, S. (2019). Access and Participation in Higher Education: Perspectives of College Students with Disabilities. *NCCSD Research Brief*, 2(2). Retrieved on June 12, 2019 from http://www.nccsdonline.org/uploads/7/6/7/7/7677280/na_focus_groups_research_brief_final_pdf.pdf
- Study.com. (n.d.). How to Become a College Professor: Education and Career Roadmap. Retrieved from [https://study.com/articles/How to Become a College Professor Education and Career Roadmap.html](https://study.com/articles/How_to_Become_a_College_Professor_Education_and_Career_Roadmap.html)
- Teacher.org. (n.d.). How to Become a College Professor. Retrieved from <https://www.teacher.org/career/college-professor/>
- The Princeton Review. (n.d.). Professor. Retrieved from <https://www.princetonreview.com/careers/127/professor>
- The Understood Team. (n.d.). 7 Things to Know About College Disability Services. Retrieved on August 22, 2019 from <https://www.understood.org/en/school-learning/choosing-starting-school/leaving-high-school/7-things-to-know-about-college-disability-services>
- U.S. Department of Education. (n.d.). About OCR. Retrieved from <https://www2.ed.gov/about/offices/list/ocr/aboutocr.html>
- U.S. Department of Education. (n.d.). Disability Discrimination. Retrieved from <https://www2.ed.gov/print/about/offices/list/ocr/frontpage/faq/disability.html>
- U.S. Department of Education, National Center for Education Statistics. (2019). *Digest of Education Statistics*. Retrieved on July 2, 2019 from <https://nces.ed.gov/fastfacts/display.asp?id=60>
- U.S. Equal Employment Opportunity Commission. (n.d.). Fact Sheet on the EEOC's Final Regulations Implementing the ADA. Retrieved on May 12, 2019 from https://www.eeoc.gov/laws/regulations/adaaa_fact_sheet.cfm

- United States Government Accountability Office. (2009). Higher Education and Disability: Education Needs a Coordinated Approach to Improve Its Assistance to Schools and Supporting Students. Retrieved from <https://www.gao.gov/assets/300/297433.pdf>
- Wolanin, T., & Steele, P. (2004). Higher Education Opportunities for Students with Disabilities: A Primer for Policy Makers. *The Institute for Higher Education Policy*. Retrieved from <https://files.eric.ed.gov/fulltext/ED485430.pdf>
- Zhang, D., Landmark, L., Reber, A., Hsu, H., Kwok, O., & Benz, M. (2010). University Faculty Knowledge, Beliefs, and Practices in Providing Reasonable Accommodations to Students with Disabilities. *Remedial and Special Education, 31*(4), 276-286.
- Zhang, Y., & Wildemuth, B. (n.d.). Quantitative Analysis of Content. Retrieved from https://courseweb.pitt.edu/bbcswebdav/pid-24880998-dt-content-rid-40566989_3/orgs/EDUC_ADMPS_SL/Qualitative%20Content%20Analysis.pdf